

COMMUNICATION  
AND  
MOUNTAIN  
DEVELOPMENT



A Summary Report of  
Two East Kentucky Studies

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# COMMUNICATION AND MOUNTAIN DEVELOPMENT

A Summary Report of  
Two East Kentucky Studies

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**U.S. DEPARTMENT OF COMMERCE**  
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PREAMBLE

This report is a summary of the purposes, data, methods and findings of two East Kentucky studies, each of which is a monograph in itself. The first, Entrepreneurship as a Development Phenomenon, is an analysis of economic performance and decision-making behavior of somewhat over one hundred manufacturing entrepreneurs over a fifteen-year period (from 1952 to 1966). It is based primarily on tax report data and on intensive interviews conducted first in 1956-57, with follow-ups of old and the addition of eligible new firms in 1965-66. The second, entitled The Communication Nexus and Mountain Development: East Kentucky Elites as Interstitial Persons, is concerned with the performance of "interstitial roles" or "cultural bridge" functions whereby mountain teachers of both sexes and men in other professions, in finance and in political posts may foster (or impede) the transmission of information and attitudes conducive to more active participation in the wider national life. This is a questionnaire-interview study conducted in 1966. It was possible to use more extensive statistical techniques in Monograph II because of both the larger numbers of respondents and the kinds of information obtained.

This summary report begins with (1) a statement of the orientation common to both monographs. It then goes on to (2) a brief statement concerning scope, methods and major themes and findings of Monograph I. In (3) Monograph II is similarly described. Section (4) draws upon both monographs, along with other research and observations in the area, to express judgments and make a few suggestions concerning mountain development problems and policies.

## I. POINTS OF VIEW UNDERLYING BOTH MONOGRAPHS

Every research endeavor reflects or develops certain orientations or points of view, whether stated explicitly or only by implication. This is inherent in the problems chosen for study to start with, and in the questions asked and the analytical frameworks used for analysis of the data. But to say this is not by any means to suggest that conclusions are predetermined, or even that the questions are all set from the start. On the contrary, there may be a re-orientation during the research, as initial findings suggest new questions and approaches. Such was in fact what happened ten years ago, with the writing of the main precursor of the present studies--People and Resources in East Kentucky.<sup>1</sup> The research for that book did not begin with a focus on people, but it became people-centered almost as if it had a will of its own. It is in people that both the toughest problems and the greatest hopes for the Kentucky mountains finally come to reside--or rather, such is the case once one pushes behind the commonly articulated desires for "more industry" to consideration of more basic social and economic ends and possibilities. Both of the monographs summarized here are thus characterized by two basic orientations, one a concept of development that is focussed directly on the welfare of people, the other a focus on human resources that incorporates as essential elements in what human resources do the processes of communication and of innovative adaptation. Each of these requires further

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<sup>1</sup>By Mary Jean Bowman and W. Warren Haynes, Johns Hopkins University Press, 1963. (That study and the 1956-57 interviews for Monograph I of the present research were supported by Resources for the Future.)

specification even in a summary, for they are fundamental to understanding what the research was all about and the implications of its findings.

### Concerning Development

Economists have an initial advantage over the other social scientists in defining what may be meant by "development." They have two measures to start with, both of which would generally be regarded as both objectively tenable and as desirable societal ends, other things equal. These are, of course, growth in the aggregate national (or regional) product, and growth in income per capita. However, this seeming tidiness and simplicity quickly disintegrates when we look further into the matter. For one thing, the measures themselves are not as unambiguous as they may seem; this is probably better recognized by economists than by the other social scientists who criticize them for "too narrowly economic" a view of things. A long line of thoughtful men from Sir William Petty through Adam Smith, John Stuart Mill, Alfred Pigou, Simon Kuznets and other national-income econometricians of the present day have, in fact, been concerned with problems of what elements in national income should be counted how, and even with how far measured income may or may not be related to "satisfactions" or, not quite the same thing, the "quality of life." A second obvious question is how far the two measures of economic growth, growth in aggregate or in per capita income, move together. Evidently, if we held population constant over a particular area, movements in the two measures would coincide, and if we take population growth in an area as an autonomous variable, the maximization of growth in aggregate income will also maximize the growth (or minimize the decline) in income per capita. However, in dealing with a part of a nation in which constraints on migration are minimal, the

aggregate income and per capita income ways of viewing development may have very different regional implications.<sup>1</sup> It is hardly surprising that businessmen who are rooted in a particular area, whether because of investments there or social ties or (more usually) a combination of these, tend to identify local economic welfare with local aggregate income; this is indeed the condition that is most likely to maximize their own incomes. Under certain circumstances, aggregate income maximization would also maximize the per capita incomes of the local population--along with net in-migration (or minimal net out-migration); but such certainly has not been the situation in the Appalachian highlands. Furthermore, if our focus is on people, not just a place on a map, we must be concerned with the per capita incomes of both those who remain and those who leave; the future (and modernization) of East Kentucky in this human-focussed sense refers to not only the mountain community of the future but the East Kentucky that is carried with migrants into cities of the north. The economist's per capita income criterion must ultimately have this broader reference, even though the statistics for empirical assessment may be less readily available. Finally, in speaking of per capita incomes, we are speaking only of averages, and an average may be raised (or reduced) in a number of different ways that carry quite diverse income distribution effects. Whether as a normative goal in itself or an indicator of solid foundations for sustained progress, a wide diffusion of income gains may be a primary economic concern. Regional economic development then entails diffusion of economic gains, and earning power in particular, among the population of the area, including in that population both those who will remain and the youth who will leave to lead their lives and make their economic contributions elsewhere.

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<sup>1</sup>There is of course a parallel to this in the international sphere, brought out most dramatically recently in arguments concerning the "brain drain."

Once we take a genuinely people-centered view of economic development as the diffusion of economic opportunities and earning potentials among a population, we have already gone a long way toward the specification of an inter-disciplinary sort of development goal. Taking one more step, we arrive at the definition: development is the cumulative diffusion of enlarged actual and perceived opportunities.<sup>1</sup> This view of development is broader than any economic definition. It is a frankly normative but a very open one. There is nothing philosophically new about it; indeed, it is firmly grounded in the American ideological heritage. However, with technological change and the increasing complexity and scale of organization of a major part of men's lives, the implementation of such a development goal must also change. Econometrics and the linear world of planners and model builders too often settle for goals of a much more superficial order, defined by what the model builders can handle. These methods are powerful, and are adding much to our understanding of economic relationships, but the caveats of which the best academic practitioners are well aware tend to be forgotten as soon as their findings are picked up by others. Selecting from what our models can most easily handle is a very upside-down way of arriving at what is important, whether as a "problem," a goal, or an instrument of policy.

Fundamentally, we are interested in a dynamic distribution norm: maximal efficiency in the diffusion of rising opportunities. This is a view that challenges the economists' tendencies to toss ignorance aside

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<sup>1</sup>This definition of development is a short way of presenting the development concept elaborated in an earlier article by Mary Jean Bowman and C. Arnold Anderson in which the concepts of "regionalism" and "development" were jointly discussed ("Interdisciplinary Aspects of a Theory of Regional Development," in Problems of Chronically Depressed Areas, Agricultural Policy Institute, North Carolina State University, November, 1965).

after a few caveats, to disregard how values and tastes are formed and changed, and to neglect the importance of human interactions in socio-economic development processes. But it is not anti-economic. Because it is first and above all centered on people, it incorporates the "economic," but puts "economic ends" where they belong, as the means of attainment of other ends. Leaving ends unspecified so far as choices among alternatives are concerned, we leave the way open to incorporation of judgments concerning the "quality of life" as part of more specific development goals--the future quality of life in a place and among those who will have come from that place.

Finally, it is important in this connection to say a word about two themes that have run through the recent history of the politics of "regional development." Especially with reference to Appalachia (and the Upper Great Lakes area), a first theme has been a concern with "pockets of poverty"; this antedated the official declaration of the "war on poverty." However, as in the history of agricultural support programs, the poverty theme tends to become submerged behind other ends and policies that are only loosely related to poverty problems. The other ends in this case have been rooted in regionalism per se, though they find a more universalistic expression in the (old) idea of decentralization of industry and the newer notion of support for "growth points"--i.e., encouragement of the development (or the creation) of intermediate urban centers in what the lingo is coming to label as "best of the worst" conditions. Starting from this direction, regionalists can then join ranks with those of us who decry the funneling of poorly equipped migrants into urban ghettos and the associated proliferation of social and economic costs of a monstrous Megalopolis.

Our definition of "development," with its emphasis on people, the quality of life, and especially the diffusion of information and opportunity throughout the population, cuts into these poverty and growth point themes along a slightly different dimension, but both must clearly have a place in any open dialogue concerning developmental policies in Appalachia and along its fringes.

Human Resources, Communication,  
and Adaptive Innovation

Both Monographs I and II are concerned with human resources, communication, and innovative adaptation, although they take up this cluster of themes in quite different ways. The communication nexus of course is more obviously central to the material analyzed in Monograph I, which draws explicitly on such theoretical constructs as Durkheim's social versus physical density, and on the work of the Lund geographers concerning the information field side of the diffusion of innovations. Communication patterns are nevertheless critical to entrepreneurship and its ecological variations. Thus common to both monographs is an interpretation of the nature of human resources that stresses communication and adaptation rather than the acquisition and utilization of "skills" as these are more commonly conceived.

A major part of recent work in the economics of education is built on micro-decision theory in the tradition of conventional-style static analysis of resource allocation and income distribution, but incorporating a Fisherian theory of capital. An imposing analytical-empirical human investment edifice has been built on this foundation. It includes analysis of on-the-job training and learning as well as levels and types of schooling, and has been further extended to treat migration as an investment. Some economists have even begun to tackle the problem of measuring or allowing for differences in "quality" of schooling, and some have asked, however

quietly, to what extent ignorance as well as imperfections in capital markets may lead to or explain "disequilibria" with respect to investments in schooling. Indeed, on the human resource formation side a few incautious souls are even beginning to ask serious questions about human learning production functions and motivations as these may be differentially conditioned by environment. The time is ripe for systematic attempts to incorporate these elements in the theoretical-empirical analysis of human resource formation. This is also one of the points at which communication theories and the new economics of human resources may find a mutually beneficial meeting ground.

Once we look behind the door, it becomes evident that analyses of human resource formation and human resource use must be closely inter-related. Indeed, only by identifying what human resources do or, better, what they have the potential of doing in alternative uses, can we determine what they are, and only when we can say something about what they are can we proceed to analyze how they are formed.

Practical men have known for a long time that in any enterprise that was on the move the most valuable men were those able to communicate, to search for solutions, and to adapt rapidly and creatively to change. Innovative businessmen said so in hearings before her Majesty the Queen of England in 1848, when they expressed their preferences for the more generally trained Saxon workers over the Englishman even though the latter had the more thorough knowledge "of his steam engine." But it is only recently that economists concerned with investment in human



capital or with the productive contributions of embodied education have begun to take hard looks in this direction, and to introduce a dynamic view into sharpened theoretical-empirical economic models that was missing from the initial Becker-Mincer formulation with respect to schooling and on-the-job learning. The first steps have been to examine relationships among schooling, human factor productivity, and investments in research and development in the United States. Meanwhile, there has been an increasing appreciation of the importance of organizational innovation, of the critical first stages of managerial learning on the job, and of the problems (most dramatic in developing nations) of learning and adaptation among workers who begin as a totally inexperienced group versus those who come in small numbers into an ongoing operation in a relatively familiar cultural setting. The interplay between human resource development and innovation includes communication and human interaction dimensions that are normally ignored when "technical change" is visualized solely or primarily as change in physical capital.

Evidence concerning communication and adaptations in entrepreneurial behavior was sought directly with respect to sources of information and ideas, but is indicated also, and sometimes more adequately, by evidence concerning relationships among educational backgrounds, decision-making behavior, and economic performance. Here the criteria of success are profit histories, stability, and growth. In Monograph II there is no attempt at an economic appraisal. In that monograph we are interested in the potentials of available mountain human resources for performance

of communication roles that may contribute to modernization over a broad front, and in the extent to which such human resources are mobilized, regardless of whether or not payment is received. Clearly the line between communication functions for which men are paid and those that escape measurement in earnings differentials or elasticity coefficients is largely irrelevant to the broader questions of transmission of information and attitudes favoring the participation of broad populations in economic progress and national culture.

## II. THE STUDY OF ENTREPRENEURS

### Entrepreneurship as a Development Phenomenon

Concern with economic development problems and processes in backward nations has led in recent years to a progressive appreciation of the facts that development does not come by investments in physical capital alone and that the dramatic big project does not necessarily bring much "development" into the rest of an economy. This is equally true of laggard regions when they have lacked effective communication with the wider society and suffer continuing severe comparative disadvantages, both physical and in human resource development. East Kentucky is such a region, with a distinct and conscious cultural identity and an economy that has retained many nineteenth century traits up to very recent times despite the technological revolution in coal mining and utilization. Under these circumstances a study of small enterprise in the area is of particular interest, and not only to understand the processes of adjustment in East Kentucky in particular, but also as an illustration of some of the processes that we might look for in the adjustment and development of other similarly disadvantaged regions and nations. Indeed, if we conceive development as entailing the cumulative diffusion of enlarged actual and perceived opportunities among a population, the up-grading of small-scale enterprises and the development of decision-making capacities among the men who control them may be one of the most important development processes. It is

difficult to conceive of any comparable diffusion of responsible roles where a big modern enterprise is planted on a society lacking in-between kinds of activities that can bridge the cultural and economic gap between the old and the new. Under such circumstances, small scale enterprise is important in at least three respects: (1) in its potential direct contributions to aggregate income; (2) as a medium for the development of human resources along a continuum that allows diverse adjustments; and (3) as it provides a set of alternatives that allows for much wider participation of a population in meaningful decision-making activities.

#### Data Sources and Interview Content

Monograph I is accordingly focused upon manufacturers of the Kentucky mountains. The basic data sources are tax records (supplemented by social security records) and interview data obtained in 1957 and again, following up the earlier study, in 1966. Although in some respects the study of manufacturers parallels Part II of People and Resources in East Kentucky, which was concerned with the East Kentucky coal industry, less reliance is placed on the tax data or on published sources, and the focus is shifted to the decision-making process. It is the entrepreneur, rather than the industry, its past fortunes, its structural changes and its prospects, in which we are interested.

One of the major tasks of this monograph is the examination of economic histories of the firms studied, and the relating of those histories to what respondents had to say about how they made decisions and how they

looked at the future. The data obtained from tax reports (both individual and business) served in part to relieve us of the necessity of pressing questions in the interviews that might have brought resistance, have made too heavy demands upon the time of respondents--or the adequacy of their record-keeping--or have invited exaggerations or understatements. Use of the tax reports further enabled us to go much more fully into some aspects of the economic history of each enterprise than would have been feasible otherwise.

The central themes of both the 1957 and the 1966 interviews were investment histories and behavior, orientations to the future, and decision-making processes. The bulk of the follow-up interview was essentially a replication of what had been done ten years earlier. However, the 1966 interview eliminated the location questions and the risk attitude analysis undertaken in 1957. It substituted more systematic collection of information concerning the respondent's age and educational background, together with a set of agree-disagree questions that focused on perceptions of the mountains versus the "outside" and of recent economic development and poverty programs. In both 1957 and 1966, interview content was adapted to the particular industry in some respects (as in the inclusion of questions concerning raw material supply situations for wood and food processors but not for firms in other industries). However, the basic content was the same regardless of industry. The main topics covered by interviews in all industries were:

1. Identifying information concerning the firm, its establishment, its structure, and current participants in decision-making.
2. Characteristics of the head or heads (age and education; prior residence and work experience; other business activities; inheritance and expectations concerning sons).
3. Products, markets, marketing methods and sales expectations, with past and anticipated changes in these respects, and why.
4. History of decisions with respect to investments in plant and equipment, and current intentions.
5. Forecasting methods, information sources, and time horizons; relations of these to (3) and (4).
6. Analysis of attitudes toward risk (undertaken systematically in 1957 only).
7. Attitudes concerning the future of this community and of the mountains in general, the rest of the local population, "outsiders," and current issues (undertaken systematically in 1966 only).

### The Study Samples

The original 1956-57 interview study was confined to mountain manufacturers. In planning the 1966 interviews serious consideration was given to inclusion of other types of entrepreneurs--especially any that might have appeared in "growth industries." Unfortunately, however, such industries and such entrepreneurs remain largely imaginary, and in 1966 as a decade earlier the study was limited to manufacturers.<sup>1</sup> Although the

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<sup>1</sup>A minor exception was the inclusion of lumber retailers who purchased their supplies from mountain wood processors or who were themselves wood processors as well.

original 1957 coverage had included interviews with both local and head-office executives of national corporations with local branches in the mountains, these were omitted in 1966. Apparel units aside, they are few, and are located, with one minor exception, on the fringes of the area. Those in the north manage clay refractories, a gas processing, and a new chemical plant on the Ohio. Several operate in the southwest but account for a very small fraction of employment there. The men operating these "foreign" establishments were born and bred in a different clime, they are temporary floating residents on East Kentucky assignments, and their orientations are to urban centers outside of the mountains. Because of the organization of the industry, the apparel establishments presented special problems; we included them in our interviews but have treated them separately. These establishments too are in the most accessible locations, in the north and the southwest and on the edge of the Cumberland escarpment against the Bluegrass. Most of their owners and managers are again men who are foreign to the mountains, though there are some exceptions. The only other semi-local or local establishments ~~excluded~~ from the sampling universe were soft drink bottling works, whatever their size, and firms with less than five employees.

Most local East Kentucky manufacturers are in wood processing (primarily sawmills, pallet and stave mills, flooring and other kiln processing). A few local enterprises produce various clay products, a few are in food processing, and small metal working and electrical machinery establishments service local coal mines. Most operate on a small scale, though a few employ 100 or more men and several of the wood processors





# COUNTY GROUPINGS:

## EAST KENTUCKY AND ADJACENT BLUEGRASS



are essentially independent managers of units of larger interstate wood-processing enterprises. The sawmills are ubiquitous, and the manufacturers servicing the coal mines have made a success of their operations back in the coal counties. Otherwise even the most local manufacturers are concentrated primarily in the north, along the edge of the Bluegrass, and in the southwest, though they penetrate further into the mountains than any of the units of national corporations. There is very little in the heart of the mountains.

Coverage of firms eligible for our study was close to universal for all employing ten men or more with the exception of sawmills. One foreign firm excepted, sawmill coverage was 100 per cent for firms with 50 or more Eastern Kentucky employees in either period. Taking those with 20 or more employees together, the 1957 coverage of firms was 87 per cent, and we estimate approximately the same ratio (possibly higher) in 1966. However, the numbers in 1966 were smaller because the decade had seen a rapid decline in the number of mountain sawmills. Sawmills with less than 20 employees rarely had tax records of any validity and few were included even in 1957.

The 1957 study area included all except the non-mountain locations (7, 7a, and 7b) on the attached map. Lewis and Greenup counties, on the Ohio River, were omitted in the 1966 interview studies of local entrepreneurs, although they are included in the preliminary overview of the past decade, to which we now turn. Table 2-6 from Monograph I, reproduced on page 16a of this report, summarizes the samples by industry and location.

EAST KENTUCKY ESTABLISHMENTS IN THE LOCAL 1957 AND 1966 SAMPLES BY LOCATIONS AND PRODUCTS

|  | 1957                           |                      |                  |                      |                    | Total <sup>e</sup> | Firms Interviewed |
|--|--------------------------------|----------------------|------------------|----------------------|--------------------|--------------------|-------------------|
|  | North <sup>a</sup> Sandy River | Upper Kentucky River | Cumberland River | Southwest Escarpment | Central-Escarpment |                    |                   |
| Wood processing:   |                                |                      |                  |                      |                    |                    |                   |
| Saw, pallet and stave mills                                      | 14                             | 9                    | 13               | 6                    | 9                  | 60                 | 40                |
| Flooring, furniture, misc.                                       | 6                              | 2                    | 6                | 12                   | 4                  | 29                 | 18                |
| Retail and wholesale lumber                                      | 6                              | 3                    | 1                | 2                    | 1                  | 15                 | 11                |
| Food processing  | 1                              | 2                    | 3                | 2                    | -                  | 11                 | 11                |
| Clay and oil processing  | 2                              | -                    | -                | 1                    | 1                  | 4                  | 4                 |
| Metal working, electrical machinery and related (Coal symbiotic) | -                              | 3 <sup>b</sup>       | 1                | -                    | -                  | 4                  | 4                 |
| Apparel <sup>c</sup>   | 3 <sup>d</sup>                 | -                    | 1                | 4                    | 1                  | 9 <sup>f</sup>     | 8                 |
| Total 1957   | 28                             | 19                   | 25               | 27                   | 16                 | 132                | 96                |
|  | 1966                           |                      |                  |                      |                    |                    |                   |
| Wood processing:   |                                |                      |                  |                      |                    |                    |                   |
| Saw, pallet and stave mills                                      | 7                              | 6                    | 4                | 6                    | 3                  | 31                 | 27                |
| Flooring, furniture, misc.                                       | 5                              | -                    | 3                | 12                   | 4                  | 26                 | 25                |
| Retail and wholesale lumber                                      | 4                              | 1                    | 1                | -                    | -                  | 6                  | 6                 |
| Food processing  | 1                              | 1                    | 3                | 3                    | -                  | 9                  | 9                 |
| Clay and oil processing  | 2                              | 1                    | -                | 1                    | 1                  | 5                  | 5                 |
| Metal working, electrical machinery and related (Coal symbiotic) | -                              | 3                    | 1                | -                    | -                  | 6                  | 6                 |
| Apparel <sup>c</sup>   | 3 <sup>d</sup>                 | 1                    | 3                | 3                    | 1                  | 13 <sup>g</sup>    | 8                 |
| Other  | 1                              | -                    | 1                | -                    | -                  | 2                  | 2                 |
| Total 1966   | 23                             | 13                   | 16               | 25                   | 9                  | 98                 | 87                |

<sup>a</sup> Excluding Greenup and Lewis counties

<sup>b</sup> Includes an old coking plant

<sup>c</sup> Includes one leather tanning

<sup>d</sup> Includes two apparel firms just outside of East Kentucky on the edge of the Bluegrass; only one firm was in both the 1957 and 1966 samples, however.

<sup>e</sup> Total establishments of firms for which tax and or interview data were obtained.

<sup>f</sup> Includes four that were branches or subcontractors of non-local firms

<sup>g</sup> Includes five that were branches or subcontractors of non-local firms.



Overview of Stability and Change in  
the Composition of Mountain  
Manufactures

There is a natural tendency among those who have been striving to encourage economic growth in a poor region to list new enterprises but to ignore the passing of old ones. Furthermore, in the mountains some that seem to be new are frequently old enterprises with new names and ownership; this is fairly common in wood processing and has occurred in apparel manufacture as well. Incidental to the laying out of the universe of firms from which to sample, we were of course forced to investigate both of these matters, and our survey of firms was complemented by data from the census of manufactures (and of population) and from social security records. The 1957 interviews provided important indications of what was then in the offing. Indeed, because the better entrepreneurs concentrate their attention on problems and opportunities of the future, and because they were then making the decisions from which many of the events of the ensuing decade would follow, the 1957 remarks were often more revealing of the processes at work than the ex post comments on what had happened looking back from 1966. Summing up briefly:

1. Sawmills, though still scattered widely through the mountains, have shrunk dramatically in both numbers of units and of employees. In part this reflects the closing of big operations that were still active in 1957 in the last virgin timber stands. However, in the main the shrinkage of sawmills reflects the fading out of numerous tiny inefficient operations, and this readjustment should probably be regarded as a favorable development.

2. In 1966 as in 1957, but in an even greater degree, other types of wood processing, involving somewhat greater investments and higher-level processes, remains concentrated in the northern and southwestern areas, which have better access to markets and can tap supply areas back into the mountains as well as locally. These firms have been economically stable over the decade, with some small net growth in outputs and increase in efficiency.

3. Technological and organizational transformations have moved bakery processing out of the mountains and have replaced tiny dairies and the family cow by modern dairy enterprises located in the north and the southwest, where they had access to supplies and from whence they could distribute their products to mountain consumers. The early postwar development of mountain roads set off the outward movement of bakery processing and contributed to the modernization and concentration of dairies in the northern and southwestern sections of the mountains. Further highway improvements along with outmigration of mountain people accelerated these changes. Coal county units of national meat packing firms had closed out following the 1957 floods, which probably merely hastened what would have happened shortly in any case. Today very little basic food processing remains in the inner mountains, though it has not gone entirely from the coal counties.

4. One of the two East Kentucky locations that was clearly viable from the perspective of 1957 was the northern counties, and among these Greenup county on the Ohio in particular. Columbia Gas established a

processing plant there in the late 1950's and attracted a new chemical plant to its industrial park. Also, the people of Greenup have found increasing jobs across the river in Ohio; the progress in Greenup is not providing job opportunities for commuters deeper in the mountains. Meanwhile, technological innovations in the clay refractories of the group 1 counties has acted as a damper on employment--as have technological changes in steel manufacture and hence in demands for fire brick. Between 1958 and 1963 Carter county lost as many manufacturing employees as Rowan county gained.

5. The other comparatively viable section of East Kentucky is along the highways and railroads that run from north to south in county group 5 and the southwesterly parts of group 4. This is the area in which apparel manufacture has taken hold most successfully, and the industry has expanded there. Pulaski county, which is half into the Bluegrass, has gained several units of non-local manufacturing firms (employing up to 100 men), this county has a fair diversity of manufacturing activities, and the most buoyant employment in locally controlled manufacturing enterprises.

6. Deeper in the mountains events have been much less encouraging--as is to be expected. There was little there to begin with, and there is little there today. Some successes at the river headwaters were scored during the 1950's and early 1960's by local metal working and electrical machinery establishments serving the coal industry, but their scale is modest and this development had already past its peak in 1966. Community efforts to establish new enterprises to employ mountain people in these sections have met with virtually universal disappointments and

frustrations, though two or three still hang on and may prove viable.

Meanwhile, the rate of out-migration has slowed as employment in the coal fields has stabilized, rates of natural increase have declined (following age-selective prior out-migration) and ill-equipped potential out-migrants have faced gloomy prospects for employment in northern cities. The coal operators have stepped up the pace of destruction of amenities, tourist potentials, and even traditional small-scale farming, as the huge new augers and contour stripping operations have turned the mountains inside out, poisoned streams, and destroyed farms below.

### Success, Survival and Growth

Success (or lack of it) can have many dimensions even when we are limiting the concept to success in the conduct of a business enterprise. Measures of success may be classed in four main categories, however: (1) Sheer survival, (2) Measurement of the living a man makes out of a business (especially appropriate for the local entrepreneurs of the mountains), (3) Measures of profit or entrepreneurial incomes as ratios to costs, and (4) Growth histories. Each of these says something, each has its limitations and its pitfalls.

#### 1. Survival

The capacity to survive is obviously a minimal condition of success, and actual survival rates would seem to be clear enough indicators of survival capacity. By this test as applied to the period 1955 to



1966, survival rates among mountain manufacturers who had qualified for inclusion in our 1957 sample and on whom we had tax data for at least the period 1953-55 were decidedly low for sawmills and pallet makers, but high (80 to 90 per cent) for other kinds of enterprises. (This excludes from consideration the food processors who pulled their processing activities out of the mountains but continued in, or took up, processing elsewhere.) However, there are several things to be taken into account in considering these survival rates.

On the one hand, we specified firms on whom we had tax data for at least the period 1953-55. As is well known, the highest failure rates are in the first years of an endeavor, and East Kentucky is no exception; whether they made a first try before 1957 or at some time between that date and 1966, firms that were not established to the extent that they already had at least five years of tax reports behind them by 1957 have had anything but high success rates as measured by survival to 1966; evidently some of these unsuccessful attempts will have escaped our count, but a rough estimate is about 50 per cent survival for local enterprises that were new since 1955. This is also the apparent survival rate for those new endeavors in our sample that were assisted financially under EDA programs up to 1965. (Sawmills reaching our size cut-off were not among the new, shortlived operations, though other wood processors were).

There is also the question as to whether the disappearance of a firm, (for some this seems a better description than its "liquidation") is

in fact a proper indicator of failure or non-success. We have avoided one trap here; if the initial owners sold to someone else, or the firm was re-named (as often happens, for example, when converting a proprietorship or even a partnership to a corporation) we counted it among the survivors. But the non-survivors include those going through planned liquidation after what their owners, at least, must have regarded as years of successful operation, as well as those that liquidated involuntarily or simply disappeared following failure to pay debts. Out of an original 89 wood processors 30 ceased operations between 1955 and 1966; of these 17 failed, five planned liquidation while entrepreneurs were still active, and eight were terminated with the death or retirement of an owner. Some in the last two categories should be counted among the successes rather than the failures. On the other hand, those terminated by death or retirement could hardly be counted among the strong successes; this is the case by definition if we include in our concept of success the building up of an enterprise that would have substantial value as a going concern independently of the very specific types of knowledge and personalized goodwill that could not be transferred from the original entrepreneurs to potential buyers of the business. By this strong test, we could count most of the non-survivors as non-successes, even if most of them could not be legitimately counted as in any real sense "failures." But observed survival is then not a very good indicator of the minimal success measure suggested in the platitude that a minimum condition of success is the capacity to survive. One must

ask to survive for how long--and, coming full circle, how successfully!

If non-survival does not necessarily signal failure, neither does survival over a given period signify success, or even that there has not been something we would have to regard as essentially failure over the specified period. Once an enterprise has become established, especially if substantial investments have been sunk in fixed equipment with low resale (or scrap) value it may go down hill for a long time before it is eliminated and gets counted among the non-survivors. There were a few such cases among our mountain enterprises, but by 1966 all of these had either closed their doors or been taken over by new, more capable management; had the latter been enterprises with smaller capital investments they would instead simply have been eliminated. But this means also that size (as measured by capital base) and efficiency at any given size are compounded in survival indicators of success.

## 2. Entrepreneurial Incomes

To the small entrepreneur his business is his living--whether or not it is also a challenge and a satisfying way of life. What counts is then the living he makes out of it, including salaries he pays to himself. To separate out some sort of profit rate on capital investments, and to compare this with alternatives, makes very little sense unless the alternatives take into account what he could earn if he were to make such a shift. For all partners or officers of family corporations taken together we accordingly looked at total incomes. To start with, we took "gross

entrepreneurial income" as comparable to proprietorship income, measuring it as the sum of pre-tax profits and the salaries the entrepreneurs paid themselves. (The latter, by the way, were varied with changes in profitability of the incorporated enterprises--a maneuver that could have marked tax avoidance advantages.) Where feasible we took a further step, to estimate the number of full-time-equivalent persons to whom this gross entrepreneurial income accrued, expressing the results as an entrepreneurial income per capita. Finally, using personal income tax returns, we also examined the personal incomes of the heads of our enterprises and the sources of those incomes.

Evidently, each of these income measures is subject to variations from year to year, and data for any single year could give a badly distorted picture if taken at face value to indicate degree of success. (There is an extensive literature on this sort of problem, and the "permanent income" notion, that is relevant here.) The problem is modified by using average values over several years. However, interpretations must still take into account the downward distortions that inhere in early-stage problems of new firms, the milder but still serially correlated income effects of depreciation and re-investment cycles within the firm, and minor (or major) cycles in demands for particular products that can affect most of the firms in a given product class over several years in a row. With this warning, we nevertheless go on to summarize the general patterns evidenced among our sample firms.

- a. There were sizable minorities with gross entrepreneurial incomes averaging under \$3,000 (or negative) in both the 1952-55 period and the years 1959, 1963. Obviously, these all had to have per capita entrepreneurial incomes below \$3,000. Most of the heads of such firms had equally low personal incomes in 1955, but this was not true of wood processors in 1963.

Among the saw, pallet and stave mills, this situation characterized a fourth of those for whom tax data were adequate for the period 1952-55 and half of those active in 1959-63. In both periods these are presumably understatements of the proportions with low incomes, since a fourth of the 1952-55 and a third of the 1959-63 enterprises lacked tax report data or data reported with sufficient regularity to include in the computations.

Whereas two fifths of the other wood processors had entrepreneurial incomes averaging under \$3,000 in the earlier period, this figure was cut to a fifth by 1959-63. Back of the poor 1952-55 record lie several special conditions: slump in the housing markets (which hit the flooring manufacturers), several coincidental fires in kiln operations, and the failures of several new miscellaneous wood processors who were unable to make it because of one or another serious flaw in the launching of the undertaking. (None of these went down because of capital stringency, by the way. They were richer in promotion talent than in technical competence or marketing know-how.)

In other industries (food processing, metal processing and electrical machinery, local miscellaneous clay processing) roughly an eighth averaged gross entrepreneurial incomes under \$3,000 in 1952-55.

The proportion over-all was about the same in 1959, 1963, but none of the food processors reported average gross entrepreneurial incomes under \$10,000, let alone under \$3,000 in these later years.

- b. Among the sampled saw, pallet and stave mills the proportions with gross entrepreneurial incomes exceeding \$20,000 dropped from 45 per cent in the earlier period to only 17 per cent for 1959, 1963. In 1955 a third, in 1963 none of the heads of such firms had taxable personal incomes of \$20,000 or more.

These declines in income positions are attributable in part, but only in part, to selective withdrawals from among the biggest of the saw-mills over the period 1955-63, along with some reorganizations and decentralizing (splitting up of responsibilities) to create separate firms as independent subsidiaries of the parent company. What we are observing in the decline of proportions with high earnings is also, of course, the other side of the increase in proportions reporting gross entrepreneurial incomes under \$3,000; the heavy rates of elimination of small mills was only partially reflected in our data, since the very smallest (and the most erratic in-and-out operations) were automatically excluded from our samples.

- c. In both periods two fifths to half of the other wood processors reported average gross entrepreneurial incomes of \$20,000 or more (a sixth to a fifth reported \$50,000 or more.) For 1952-55 this meant a bimodal distribution (partially explained above), but by 1959, 1963 the distribution is smoother. In both 1955 and 1963 a fifth of the heads of these firms had personal incomes exceeding \$20,000.
- d. Among other than wood-processing firms, proportions with gross entrepreneurial incomes exceeding \$20,000

ranged from roughly three to four fifths, but shifts within that upper range differed among industry and product types. These proportions approximately matched the proportions of heads of firms with total personal incomes exceeding \$10,000 for all product categories except the food processors.

Among the metal, electrical machinery and local clay processing establishments for which we had tax data, there was considerable entrepreneurial earnings and personal income slippage between 1952-55 and 1959-63. On the other hand, there were striking jumps to the \$50,000 entrepreneurial income class among food processors and the few apparel firms for which we had usable tax data for locally controlled units. Food processors were distinctive in the very high proportions with 1963 personal incomes of heads exceeding \$20,000; these men made up 86 per cent of the total, a figure slightly in excess of the proportions of firms with gross entrepreneurial incomes above that mark, despite the fact that the latter measure can be of incomes accruing to several people. These food processors of 1963 are indeed active and successful by almost any yardstick.

### 3. Proportions of personal incomes derived from the business; a digression

Differences by industry and product type in these proportions give an interesting perspective on the characteristics of the mountain entrepreneurs that deserves at least comment in passing.

Men heading the simplest and most traditionalist activities (saw, pallet and stave mills) together with those located deepest in the coal counties and servicing the coal mines, have been the most likely all along

to concentrate all their efforts and all their funds on the business, though this propensity had declined from over half of such heads in 1955 to 40 per cent in 1963.

Proportions with sufficient other investments or involvements in other activities to account for at least ten per cent of reported incomes were highest, by contrast, among the other wood processors (flooring, dimension stock, miscellaneous other kinds of products). They made up two fifths of the 1955 and almost three fifths of the 1963 wood processors exclusive of saw, pallet and stave mills. These men include most (not all) of those manufacturers who have taken a particularly active part in local economic affairs and who exercise the most leadership in attempts to attract new enterprise. Indeed, several of them head community-sponsored undertakings, among other things. As we should expect, they are located in the more economically viable northern and southwestern counties, and out from under the shadow of the coal county power elites.

It is among the food processors that we find the smallest proportions whose economic involvements were confined to and totally bounded by their enterprises; there were no such food processors in 1955 and there was only one (out of the seven that qualified for our sample) in 1963. On the other hand, their enterprises are indisputably their central economic concern; five of the seven heads of food processing firms qualifying for the study in 1963 received over 90 (but under 100) per cent of their incomes from the food processing business.



#### 4. Profit rates

Although we were able to make good use of measures of profits as percentages of sales in the analysis of cost structures, these rates are of little or no use as indicators of success. They are subject to all the limitations of the measures already discussed, and in addition they confound high mark-up rates with profit maximization. However, for reasons already indicated, the expression of profits as rates of return on capital invested in the business is equally suspect; in fact it can be worse still. We encounter not only the fallacy of applying capital theory to truncated time intervals, but also, and most emphatically, empirical estimates can be wildly distorted when human capital embodied in the entrepreneur quite overshadows other investments he has made in the firm. We therefore pass on to indicators of growth.

#### 5. Growth in sales and depreciable assets

The thesis that growth is both an essential to and in itself an index of success in a business enterprise has spread in economic writings over the past two decades, and with good reason. Evidently this, like any other generalization, must be accepted only with qualifications and applied with discrimination. When working at a truly micro-level and with small numbers of enterprises, as in the present research, the cautions must multiply.<sup>1</sup> Nevertheless, when measures of changes in sales and in

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<sup>1</sup> Furthermore, there may be instances in which activities within the mountains are contracted (or eliminated) but activities of the firm

depreciable equipment as indicators are combined, the general picture that emerges is quite clear. The following summarization refers only to firms that were in business in 1963, omitting those of the earlier enterprises that had been terminated before that date. It is thus concerned with growth only among the survivors.

The simplest and most readily available indicator of size and hence also of growth is sales. Evidently, even if we set the problem of price deflators aside, observed changes in sales can of course be evidence as much of variability from one year to another as of longer-term decisions and evolution of the business. To counterbalance this, the kind of measure we found most useful was change in cost value of depreciable assets. This is more accurately reported than net investments in such assets, and is available for all kinds of business organizations from the one-man proprietorship to the corporation. It is of course subject to specification biases (as are all the other measures), and it may be telling us as much about change in technology as about growth. But the latter is not necessarily a disadvantage. We can go on to examine changes in relations

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elsewhere are expanded; as with the use of survival rates, the localized versus the geographically unconstrained way of looking at the growth of a firm must be distinguished. One view is appropriate to assessing the economic history and prospects of an area, quite another to study of entrepreneurship. However, this problem is minimized by the fact that we are looking at the 1966 sample, and that mountain entrepreneurs of that date who had shifted any major part of their activities out of the mountains, let alone out of Kentucky, are rare indeed, even though some have shifted locations within the area covered by our research.

of sales to the cost value of depreciable assets, thereby obtaining clues to associated changes (if any) in cost or input structures and production methods. The growth (or contraction) picture that emerged for East Kentucky manufacturers over the period 1955 to 1963 (again excluding those businesses that were terminated in that interval) was as follows:

- a. Among the saw, pallet and stave mills, almost half had reduced the cost value of depreciable assets, and over half had lower dollar sales in 1963 than in 1955. Those who did not contract over this period definitely expanded, however; there were none who experienced a growth in sales or in depreciable assets and yet grew in either of these respects by less than 50 per cent. A sharp growth dichotomy is thus evident.
- b. Among other wood processors, the concentration of cases was decisively to the relatively high growth end of the scale. Two thirds increased their sales by 50 per cent or more between 1955 and 1963, and half of these at least doubled their sales. In 85 per cent of the wood-processing enterprises other than saw, pallet and stave mills, the cost value of depreciable assets was increased by at least 50 per cent, and two fifths at least doubled their depreciable assets.
- c. Among the firms in industries other than wood processing there was again a substantial 1955 to 1963 expansion in depreciable assets. Over three fifths of those surviving to 1963 increased plant and equipment (at cost values) by at least 50 per cent, and a third doubled those assets. Food processors dominated this shift, which was paralleled by increases in their sales, though to not quite the same extent.

A summary size index gave each firm its highest code on any of the three items; sales, cost value of depreciable assets, or number of employees. Then the highest scores were taken for the years 1952 or 1955 and 1959 or 1963. A summary rough indicator of growth is then whether the movement from the 1952, 1955 to the 1959, 1963 maximum

is down, the same, or up. The index is relatively insensitive for the biggest firms, which will rate "the same" unless they contract very substantially (and few of the biggest firms that remained in business contracted to that extent). The percentage distributions for firms in the 1966 sample were as follows:

|                                | Down            | Same | Up   | New<br>since<br>1955 | Total |    |    |
|--------------------------------|-----------------|------|------|----------------------|-------|----|----|
|                                |                 |      |      |                      | %     | N  | NR |
| Saw, pallet and<br>stave mills | 21              | 47   | 26   | 5                    | 99    | 19 | 8  |
| Other wood processors          | 9 <sup>a</sup>  | 27   | 41   | 23                   | 101   | 22 | 3  |
| Retail and wholesale<br>lumber | (20)            | (40) | (40) | --                   | 100   | 5  | 1  |
| Total wood                     | 15 <sup>a</sup> | 37   | 35   | 13                   | 100   | 46 | 12 |
| Firms in other<br>industries   | 11              | 32   | 25   | 32                   | 100   | 28 | 9  |

<sup>a</sup> Includes one firm that came in between 1955 and 1963 but had failed by 1963.

### Cost Structures, Technology, and their Modification through Time

From the quite extensive analysis of cost structures incorporated in Monograph I, we will here draw out a few points that may be of most interest to EDA, omitting the analytical framework and refinements. The main kinds of evidence presented are directed to (1) assessment of capital intensities and changes in this respect over the past decade (having

reference to physical capital only); (2) the delineation of short-run cost structures in wood processing, and some implications from this analysis with respect to cost shifts within the 1952-55 period; (3) long-run relationships between scale and entrepreneurial rewards.

### 1. Capital intensities

As a rough approximate index of capital intensity, we took for each firm its highest ratio of sales to cost value of depreciable assets for 1952-55 and for 1959-63. This was as close as we could get to an inverse capital/output ratio at capacity operations. The results are of interest both as they distinguish firms in different categories at any one time and for what they may suggest concerning changes in capital intensities within product or industry categories over time.

As of 1963, the product categories could be quite unambiguously grouped by capital intensity as follows:

- a. Most capital-intense. These are product categories in which all firms had maximum scales/capital ratios under 10.0 and 80 per cent had ratios under 5.0. They are the food processors and the flooring, furniture and other miscellaneous wood processors. Both of these sets of firms, but especially the food processors, had substantially increased their proportions in the most capital-intense bracket over the period from 1955 to 1963.
- b. Moderately capital-intense. These were very close to group a, but with somewhat greater spread. However, this is a catch-all rather than a distinct industry class. It includes metal, electrical machinery and local clay processing enterprises.
- c. Intermediate in capital intensity. These are the saw, pallet and stave mills, and the only reason they are classed as

"intermediate" is of course because we had another group of firms with still lower capital intensities. Somewhat over two fifths had sales/capital ratios of less than 5.0, a third were between 5 and 10, a fifth between 10 and 20.

- d. Extremely low capital intensity. Among the local apparel firms a majority had maximum ratios of sales to cost-value of depreciable assets that exceeded 20.0 and none were as low as 5.0 in either the 1952-55 or the 1959-63 period.

Though this summarization lays before us some of the major inter-industry contrasts in technologies, it provides an inadequate picture of changes over the period from 1952 to 1963. We divided the sampled firms according to whether sales/capital ratios for 1959 minus those for 1952-55 were (1) down by -1 or more, (2) between -1 and +2, or (3) up by +2 or more.

Among saw, pallet and stave mills roughly a third came in each of these categories. The other wood processors departed from the pattern in minor degree only, with a slight net tendency among the established and persisting firms toward an increase in sales relative to fixed capital stock.

The apparel units all increased their outputs relative to equipment costs--a development that almost certainly reflected an on-the-job learning process on the part of both managers and their workers, and may have reflected also more ready, better schooled, accessions to on-going labor forces.

Food processors, by contrast, were mechanizing rapidly; most of them substantially increased the capital intensity of their operations as

we have measured it. However, among the miscellaneous other manufacturers there was little shifting in either direction; almost all stayed very close to the same position throughout.

2. Short-run cost curves in wood processing; their shapes and shifts

Experimentation in the construction of short-run cost curves from 1952-55 data were carried out for sawmills and for flooring and other kiln processors in East Kentucky and similar counties of the Kentucky problem crescent, extending from the eastern mountains across a southern section of the state and up again into the western coal fields. This proved very interesting, but it is also a laborious process, the value of which depends upon further use of price, wage and employment data from sources that supplement and check the evidence obtained in tax reports and interviews with sample firms. (This includes both published or other publicly open data and firm-by-firm information from confidential Department of Economic Security files.) Consequently it was not repeated for the 1959-63 period, Though such replication could be of considerable methodological and theoretical interest, its likely immediate importance from a public policy point of view was judged insufficient to justify the time and costs that would be entailed.

The basic total cost measure used in construction of short-run cost curves was simply sales minus GEI, where GEI refers to gross entrepreneurial incomes, already defined. The methodology is set forth

and critically evaluated in Chapter IV of Monograph I, where other types of evidence and checks on interpretations are also presented.

The findings with respect to sawmills tell a good deal of the story of what happened to sawmill enterprises in the ensuing decade. Among those findings were the following:

- a. For all sawmills together and within each of the two size categories averaging sales of \$20,000 per annum or more, there was a very distinct downward shift in unit costs between 1952-53 and 1954-55. This did not occur in any conspicuous degree for the smaller mills.
- b. A major part if not all of this shift is explained by a sharp decline in payroll costs per dollar of sales. This initial shift coincided with the 1954 recession, but continued with the marked 1955 increases in sales that characterized most sawmill operations. (1955 was more often the maximum sales year than was any other of the four years analyzed.)
- c. The decline in payrolls relative to sales between the first half of the period and 1954 (a decline that continued into subsequent years) that characterized the larger sawmills might be attributed to reduced wage/price ratios in 1954, but wages in those firms rose faster than prices between 1954 and 1955, and over the full four-year period there was unquestionably an increase in output per man.
- d. The increased labor efficiency just noted for the larger classes of sawmills apparently could not be explained by any increase in cost values of depreciable capital that could have been coming into use. This would not preclude as an explanatory factor the complete discarding of old equipment and its replacement by more efficient new equipment at no higher a cost price. Interview data indicated no major changes of this kind over the relevant period within firms, but some such effects may have been picked up in aggregating larger firms that were expanding with others in a stage of planned liquidation.
- e. In middle-sized mills (\$100,000 to \$200,000 sales) improvements in productivity were negligible, and the 1954 to 1955



increase in wages virtually wiped out profits even though wages in those mills did not rise as much as in the biggest ones.

- f. The smallest sawmills in our sample, typically with sales under \$100,000 in all years and averaging for all years under \$50,000, made profits on sales only with the 1954 wage decline. They made no productivity advances and despite the rising 1955 demand and lagging wage adjustments they were operating in the red in 1955.
- g. Although attempts to specify short-run cost curves were hampered by the evident shifts in those curves among the larger sawmills over the years 1952-55, the evidence strongly indicated essentially constant short-run marginal costs within each broad size category.
- h. In all but the smallest sawmills, payrolls vary much less than sales. This pattern was evident even when adjustments were made to take into account the shifts in labor efficiency through calendar time. Thus the constancy of total marginal costs was maintained in the face of declining marginal expenditures on payrolls, which were overshadowed by increasing marginal costs of materials inputs.

Turning to flooring and other kiln processing, again for the period 1952-55, we found:

- i. Short-run cost curves were characterized by consistently declining marginal costs, though the rate of this decline was low (second differences were small).
- j. A shift between 1953 and 1954 again reduced payrolls relative to sales, but without a downward shift in total costs per unit of output such as characterized sawmills.
- k. Payroll costs rose or fell more than proportionately with short-term increases and decreases in sales; this was the opposite of the payroll elasticities observed for sawmills.
- l. There was evidence of the beginnings of an increase in capital intensity that had not been indicated in any significant degree for sawmills. This process seems to have continued into the immediately following years.

### 3. Scale and entrepreneurial rewards in the long run

Characteristics of long-run cost curves and relationships between efficiency (or entrepreneurial rewards) and scale were examined for non-wood as well as for wood processing enterprises, and in both 1952-55 and 1959-63. We started with two measures of returns and two parallel definitions of costs. The first of these was again gross entrepreneurial income (GEI) and the parallel unit cost measure was simply  $(\text{Sales} - \text{GEI})/\text{Sales}$ . The second measure (AP) was developed initially with the idea of isolating profits proper from wages of management, but this could not be done directly. In the end what was done was simply to deduct an allowance of \$3,000 per full time participant in gross entrepreneurial income. Thus if four men were essentially full-time partners the deduction from GEI to get AP would have been \$1,200. Since AP was always less than GEI, the parallel unit cost figures were of course slightly higher for AP; they included the \$3,000 management allowance. Today the reader may be inclined to interpret that \$3,000 as an injection of the "poverty line" into our cost measures, but the "war on poverty" was officially proclaimed some time after the first application of these adjustments to the 1952-55 data, and the way the \$3,000 figure was first chosen had nothing whatsoever to do with poverty criteria. Instead, this very low figure was based on responses to 1957 interview questions concerning how much a man considered he should count as return to his own time and effort before figuring rate of return on capital invested in the business.

For local East Kentucky enterprises the modal 1957 response was \$3,000 and deviations from that figure were more often below than above it. For some this represented a reasonable opportunity cost estimate, for some the amount deemed necessary for living expenses, over and above which all returns would be reinvested. For the most progressive and prosperous of the mountain entrepreneurs the \$3,000 figure was obviously much too low to be a true opportunity cost estimate, but empirical estimation of the latter on an individual basis is at best rather arbitrary, and results would be difficult to interpret. The standard \$3,000 operates primarily to pull down rates of return relative to sales, and correspondingly to raise estimated unit costs, in the very small enterprises relative to those in middle-sized and larger undertakings. Scattergrams in which sales were plotted against unit costs were drawn (for each of the two cost measures) for firms in each product class for single years separately and for the means of the period 1952 to 1955 and of the two years 1959 and 1963. Though variances in unit costs were higher on the single year plottings (and among the smaller enterprises), the general picture of long-run cost curves indicated by these graphs was essentially stable. In reaching conclusions concerning relationships between scale (as measured by sales) and costs or entrepreneurial rewards in wood processing, we were of course able to supplement this analysis by locating the short-run cost curves along a long-run scale range encompassing all size classes. Findings with respect to long-run cost structures are here summarized for selected product categories.

Sawmills. Initially declining unit costs within the smallest size range showed up only when using the AP base (that is, when \$3,000 per full time "entrepreneur" was counted as a cost). With all measures, including evidence from the size-classified short-run cost analyses, slightly declining unit costs were indicated for the range from sales of \$100,000 up to (and possibly beyond) \$400,000, but above \$200,000 the scale effects were very mild ones. When pallet and stave mills were separated from sawmills (as was done in the 1952-55 but not in the later data), the pattern was one of constant costs on the GEI measure, of initially declining, then constant costs when the AP base was used, but the size range among reasonably stabilized mountain enterprises turning out pallets, box frames or staves is a narrow one.

Flooring and other kiln processing. None of these are really small enterprises if we compare them with the size range for sawmills, and the adjustment to the AP base therefore had no perceptible effect on relationships between size and unit costs. There was a quite consistent pattern of moderate long-term economies of scale, matching the short-run declining marginal cost pattern already noted.

Food processing. Among the food processing concerns that were eligible for inclusion in our sample, there was little evidence of any effect of scale on profit rates or unit costs relative to sales. Breaking food processors down by sub-categories there was some indication of scale economies for dairies, however; they appeared to reach maximum efficiency by our indicators only when they approached the million dollar sales level.

Interview findings suggest that this is in fact the situation, and that we fail to observe the strength of declining costs through the smaller sizes precisely because the small firms were so very inefficient and were being crowded out of business; they were not there for us to study.

Apparel. The estimates for apparel firms were problematic because of the mixtures of local and non-local control and the peculiar accounting practices that are common with respect to allocations of overhead. The 1952-55 data covered all such enterprises in the state of Kentucky. With the exception of the smallest firms (small in this case being under \$500,000 sales), unit costs per dollar of sales were remarkably similar across firms, regardless of size. On the other hand, scatter in the smaller firms was very wide, and though a few managed to get along for some time, most lead a very precarious existence and provided their proprietors with average "entrepreneurial" incomes that slipped below \$3,000.

Other products. The firms producing products other than those singled out for treatment in the immediately preceding paragraphs were distributed too thinly among too great a diversity of products to justify comparable analysis of long-run cost structures. However, lumping them together the pattern seems to be similar to that for the flooring and other kiln-using wood processors: very slightly declining long-run cost curves over an observed intermediate size range.

To sum up with respect to long-run unit costs: over-all the pattern evidenced by enterprises that were sufficiently stable to permit their inclusion in the sample and the analysis was one that approximated

long-run constant or moderately declining costs except that when \$3,000 per full-time entrepreneur was included in the measure of total costs the economies of scale over the smallest segment of the size range were marked. These were missed in most of our observations, however, because the small units were too inefficient to survive.

Given our measurements of costs, long-run constant unit costs of course imply gross entrepreneurial incomes rising proportionately with sales or, using the AP measure, gross entrepreneurial incomes in excess of \$3,000 per capita rising proportionately with sales. Entrepreneurial skill is undoubtedly associated with size (as with growth), and this prevents the appearance of any increasing cost tendencies in our data. Turning this around, if we look at the evidence in terms of what scale of undertaking it takes to provide one or another level of living to the entrepreneur with any given assumed qualifications, our data would imply a decided size-efficiency correlation in moving from the lower of the observed relative size ranges for any given industry category to at least the intermediate if not the upper size ranges, depending upon the scale at which sharing of management functions and hence of what we have called "gross entrepreneurial income" neutralizes increases in the total GEI to be shared. It does not follow, however, that all the little enterprisers would be better off if they were bigger; they might instead just lose money in bigger ways. This last point is an extremely important one to remember. Putting it in another way, the most critical input of capital services in an enterprise is

the services of the human capital embodied in the men who direct it, who determine economic strategies and tactics, who adapt to or even lead change--or who fail to do so.

### Financial Practices and Sources of Funds

Relationships such as we have just described between scale of enterprise and efficiency are often interpreted to suggest that what is clearly indicated is a need for more widely diffused opportunities to acquire efficient equipment on favorable terms with regard to both prices and credit, and that direct government participation in the provision of improved, more widely available, and more generous credit facilities could be the answer. That such a position must be strongly qualified by considerations of the complementarity rather than substitutability between human capital inputs of entrepreneurs and the scale of other inputs was indicated above. However, it is important to look more directly into the financial practices of the mountain enterprises, together with such evidence as may be available concerning financial constraints on action. Because of the questions that are repeatedly asked by EDA and others on this matter, the materials relating to use of and experience with new Federal financial assistance and credit programs (and with SBA in general) in the mountains have been summarized quite extensively in Section IV of this report. Taking that summary as read into this one, attention is here directed solely to the nature and extent of debt financing, and to attitudes of respondents toward local and city bankers.

1. Interest payments and the extent of debt financing

The first thing that must strike the economist studying mountain enterprises, especially as of ten years ago but also in considerable measure today, is the large proportion who apparently incur no interest charges at all over a year's period (or who incur charges so small they do not bother to put them down in tax returns even when to do so would reduce taxable income). On the other hand, there are very few who did not report interest charges at least for one year among the six for which we obtained data (1952, 1953, 1954, 1955, 1959 and 1963).

Amounts paid out in interest were used as the best data for analysis of financial practices for two reasons. First, they are available for all enterprises, whether proprietorships, partnerships or corporations. Second, whatever the errors in reporting interest costs, they are miniscule compared with the problems of interpretation of balance sheet data even where the latter were available. Relating interest payments to sales and to entrepreneurial incomes avoids all the problems associated with treatment of depreciation and valuations of net worth.

Although we did not explicitly obtain information concerning rates of interest paid by these entrepreneurs, our interviews were such that we can be quite sure that overtly, visibly high interest payments were not a problem. Neither was there any indication of high interest concealed in purchases of materials or equipment on credit; such purchases were financed in other ways, not by the seller. Unfavorable credit terms concealed in financial assistance from customers could have eluded us and,



more important, our respondents; however, here again this does not appear to be an important problem in mountain businesses. The chief types of enterprises receiving financial help from customers were pallet and crate producers, who were sometimes assisted by national corporations such as General Motors, and local semi-independent (or totally dependent) cut-and-trim apparel operations. The former were given managerial assistance as well as financial credit, and on what looked like quite favorable terms. The situation of cut-and-trim apparel units is something else, but this is a pervasive feature of the organization of the industry, it is in no way peculiar to the mountains, and these units commonly receive local community subsidization in the free use or low rental of the space in which they operate.

In using interest payments to analyze the extent of debt financing, we constructed two measures. One of these was interest payments per \$10,000 sales, hereafter designated simply as interest/sales. The other was interest payments as a percent of the sum of gross entrepreneurial incomes plus interest, which we will abbreviate as interest/earnings. Among the more interesting of our findings in the application of these measures were the following:

- a. Among East Kentucky saw, pallet and stave mills interviewed in 1957, a third averaged interest payments of less than \$10 per \$10,000 of sales; ten percent had per annum interest payments above \$100 per \$10,000 of sales. Close to half had interest payments under one per cent of "earnings" (i. e. of gross entrepreneurial income plus interest payments).

- b. Among saw, pallet and stave mills continuing in business from 1955 to at least 1963, seven tenths reduced and a fifth increased their interest/sales ratios. Nevertheless, more showed a rise than a decline over the decade in their interest/earnings ratios. This was associated with reduced rates of return per dollar of sales.
- c. As a group, flooring and other miscellaneous wood processors make much more use of debt financing, both long and short-term. This was particularly the case for the period 1952-55, when all such firms had interest payments exceeding \$20 per \$10,000 of sales; a third reported less than that in 1963. (Interest took up a similarly high proportion of what we labeled total "earnings" in the earlier years, a quite modest proportion in 1959, 1963. Indeed, in the latter year half of the firms in this product category had interest/earnings rates under 10 per cent, and most of these were under one per cent.)

Both cyclical fluctuations in sales and profits and longer-term investment cycles are reflected in these figures. Equally important, they reflect also the quite flexible and efficient credit supply situation so far as this particular group of entrepreneurs is concerned. They have access to credit and they do not hesitate to use it. Neither do the retail and wholesale lumber firms, but these have been to a greater degree self-financed out of accumulated past earnings.

- d. For all wood processors taken together, there was no relationship between sales size and the interest/earnings ratios in either the earlier or later years.
- e. On the other hand, the conservatism and lack of business sophistication of the smallest enterprisers was evidenced by the much larger proportions among them who reported interest payments under \$10 per \$10,000 of sales--in both the initial and the follow-up study periods.
- f. As of 1963, though not in 1952-55, there was a strong and neatly ordered positive association between the interest/sales index and scale among wood processors.

This last observation is the more interesting in that the 1963 sample has relatively fewer firms at either of the extremes of the 1955 wood processing size distribution. Reflected here is a post-1955 association between debt financing and growth that had not been as evident in the first postwar decade. This appears even more clearly among the firms in other industry categories. (Apparel units are excluded in these observations because of peculiarities in their financing.)

- g. Firms in industries other than wood-processing repeat the systematic positive associations observed for wood-processors between interest/sales ratios and sales size, both in the earlier and the later period.
- h. Unlike the wood processing enterprises, those in other industries display also a positive association between interest/earnings percentages and scale in 1963.

It is important to note that this association is really striking when the 1952-55 interest/earnings ratios are compared with 1963 sales; it is clear enough, but less dramatically so when the comparison is between 1963 interest/earnings ratios and 1963 sales. It is weakest in comparisons of 1952-55 interest/earnings ratios with 1952-55 sales. There can be no question whatsoever of the importance of debt-financing in the middle 1950's as a basis for the investments that are now producing the higher sales figures among these firms, and this is not just a matter of what was happening in food processing. It characterized metal and electrical equipment production as well.

## 2. Attitudes concerning financing agencies and credit availability

During the course of the 1957 interviews a fairly full picture of the financing practices of mountain manufacturers and the sources to which they turned became evident. These varied with location and characteristics of the enterprise. A few, as we have already suggested, received substantial financial assistance from their prospective customers; this applied especially to the pallet makers. The most progressive and largest of the mountain enterprises dealt with banks in Lexington or in Ashland when major investments in capital equipment were being considered; this was of course especially common in the northern and southwestern parts of East Kentucky. Regardless of location, there was a minority that contacted SBA at one time or another, the numbers doing so rising in the wake of floods and also (but with less effect in actually arranging loans) with the recent ARA-EDA credit programs. But behind all this, and by far the most important for most mountain enterprisers, is the distinctively personalized local system whereby men find needed money--and other men find uses for free funds that appeal to them. The local bankers are part of this personalized structure, in which the most important security a man can give is his own reputation and history in a community in which no one is anonymous. This has very great advantages so far as flexibility in meeting financial needs is concerned provided it does not become at the same time exclusive, or highly conservative in the kinds of things in which local bankers will take an interest. Meanwhile, paralleling the local banks, as part of this system, is a decidedly

informal and personalized process by which equity funds are obtained. Here again, relationships are personalized; this is a very fundamental aspect of mountain culture. A local man who has funds that he does not want to put into a business of his own (or at least not alone) is very likely to look around locally rather than to put much into a portfolio of nationally traded stocks and bonds. He is very likely to buy real estate, and/or he may take a flier on local gas or oil drillings, but he may also or instead look around for (or have been approached by) someone who has ideas about how he could invest that money to expand (or initiate) a local enterprise. He will judge such a prospect first of all by his judgment of the individual who proposes it and, of course, by whatever relevant knowledge or experience he may himself possess. He may also prove responsive to the persuasive powers of a man "full of ideas." This is quite an effective communication system, and if results are occasionally a little wild (as they are apt to be when the supplier of funds has no business experience or inclinations himself), it leaves room for "a little bit o' luck" to work out in ways that would be difficult to arrange by more formal institutions.

### Time Horizons, and Expectations

Up to this point most of the discussion has been based upon analysis of data from income tax reports, social security records, or published documents. Though occasional comments drawing more directly from interview materials have been injected at some points to provide interpretative illumination of other findings, the decision-making process itself has remained in the background. It is time that this process came center-stage. How far

do heads of the various mountain enterprises look into the future, for what purposes? In what ways are actions and forecasting or prognostications linked? No analysis of entrepreneurship as a development phenomenon can possibly disregard questions such as these.

### 1. Time horizons

Time horizons vary with the nature of the business, the kinds of decisions that are being made, and characteristics of the individuals who are responsible. The effects of the first two of these three sets of determinants were neatly stated ten years ago, in Modigliani's treatment of "relevant" and "conditionally relevant" parameters and of "first moves."<sup>1</sup> This frame of reference applies to the small enterprises of the Kentucky mountains quite as well as to the large businesses interviewed as a background to Modigliani's analysis. However, it applies to only one (albeit the most important) sort of time horizon--perhaps best described as functional-specific, by which is meant directly action focussed. In fact the time horizons evidenced by respondents in this study included much more than the relevant and conditionally relevant parameters of Modigliani's model. There were also what might best be described as "functional-orientational" expectations, which had a more diffuse and generalized relevance to entrepreneurial behavior, but not necessarily a less important impact. And there were non-functional, or seemingly non-functional, conceptions of the future: many respondents stated

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<sup>1</sup> Franco Modigliani: "The Role of Expectations and Plan in the Economy of the Firm," Studies in Business Expectations and Planning, University of Illinois, Bureau of Business and Economic Research, 1957.

that they frequently enjoyed a kind of idle speculating about the future beyond anything affecting current decisions--"it doesn't help any, it's just a sort of game." Such games almost certainly feed back into entrepreneurial decision making, however. Indeed, there is no sharp line between functional-specific and functional-orientation outlooks, or between the latter and non-functional expectations. It is useful, nevertheless, to start from the functional-specific end in organizing the analysis of respondents' time horizons. However individual differences may operate in locating men in one or another situation, and even in defining what that situation is, certain modes of behavior vis-a-vis the future would be predicted, as in accord with sound benefit/cost balances in the economics of information gathering and processing. This was clearly evident, cutting across all the idiosyncracies of individual mountain entrepreneurs.

- a. Among wood processors the longest time horizons involved clearly action relevant future parameters with respect to the assurance of future timber supplies.

Assuming a desire to continue in business over an indefinite period ahead (a long functional-orientational time horizon), the insurance of continuing supply sources was essential. At the same time, action designed to provide this insurance (buying of timber land or timber rights, in many cases) involved minimal commitments concerning details of future operations.

- b. The other manufacturers who gave careful and explicit attention to supply prospects, and over extended supply horizons, were dairies and a strawberry freezing operation, and there was more attention to these matters at the time of the 1957 than of the 1966 interviews.

Here again, there was sound reason for devoting time and effort to analyzing these prospects, reasons that did not apply, for example, to the bakeries. The dairy industry was just going through a drastic reorganization and the development of steady and reliable supplies of fluid milk was absolutely essential if planned growth was to be successfully implemented and sustained; the progressive dairies of ten years ago were taking a lead in the building up of those milk sheds and in educating the farmers to meet quality standards. Development of a steady strawberry supply was equally important to the freezing establishment. There was no comparable reason for concentration upon supply horizons among bakeries, for example, or among any of the firms servicing the coal industry. Moreover, a new equilibrium growth path seems to have been reached over the past decade that has reduced the amount of attention 1966 respondents were giving to milk supply prospects.

- c. Regardless of the industry, long time horizons with respect to projections of demands were similarly associated with active concern with the enlargement of demand by expanding market areas and customer contacts, and by product modification and adaptation.

This was definitely not a typical sort of behavior among mountain enterprisers, but a few were scattered over the mountains. They included wood processors who were developing distinctive products or minor specialties, for geographically wide sales, others who were looking especially to obtaining a sizable share in the growing Lexington markets for more standard products, and several enterprisers in quite other industries.

- d. Again regardless of the industry, long time horizons with respect to projections of demands were of course associated with plans for major expansions or replacement (and technological reorganization) of expensive durable equipment.



This again is especially conspicuous among the dairies, both as of 1957 and of 1966; it reflects both the major expansions that were anticipated looking forward from 1957 (and in lesser degree from 1966) and the rapid pace of mechanization of dairying, with the expensive equipment that this has entailed. Rising investments in improved equipment have been less dramatic relative to base year positions in other industries, but the dairies have been by no means unique among mountain enterprisers in making investments in new and improved capital equipment looking to a future as much as ten years away.

- e. Two fifths of the wood processors, mainly but not exclusively in sawmilling, had had no reason to consider demand prospects for more than a year or two ahead at any time during the five years prior to the 1957 interview. However, men with such limited horizons were only an eighth of the 1966 respondents.

This change is of course largely a reflection of the sifting out process that has been mentioned several times before.

- f. The longest time horizons were disproportionately those of men who were looking ahead to the coming generation of sons in the family business.

Again and again it was evident that familism of this kind contributed to initiative and planning, and made old men young. It confounds correlates of age with all of our indicators of planfulness in entrepreneurial behavior, and cuts across industries. However, there are definite correlates with the nature of the business and its location. The progressive entrepreneurs looking to the futures of their sons were more often in the more favored locations, (the northern or southwestern counties). Although scattered across the range of industries and product types, they were highly exceptional in saw-milling or pallet and stave manufacturing, most frequent in other types of

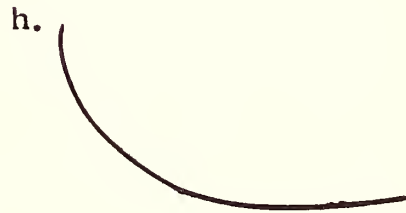
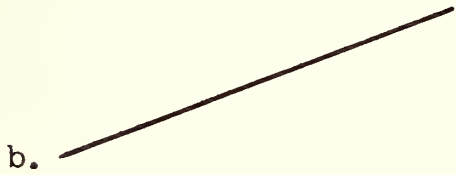
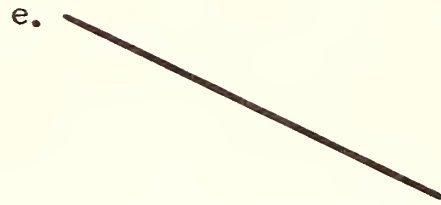
wood processing and among food processors. It must be stressed that we are not speaking here of the mere fact that a man has sons who might inherit, but of prospective inheritance (including presently participating sons) as a vitalizing force for both the older man and his sons.

2. Sales-path curves, the future  
and the past

A very simple device, which was used for several purposes, was a set of curves showing various possible or likely movements of sales that might be anticipated over the coming ten years (looking from 1957 forward or from 1966 forward) and also, looking back from 1966, to choose the curves best describing the movement of sales over the period from 1957 to 1966. The curves shown respondents are reproduced in their original form on the following page. The blank space was for the use of those who wished to draw in their own paths when none of those presented seemed to be appropriate. Those using that option were few; those who used it in describing anticipations of the future were entrepreneurs who had one reason or another to expect the immediate future to deviate sharply (either upward or downward) from anticipated longer term developments.

An important feature of the curves is that while they have both direction and shape, no specific values were attached to them; they are drawn entirely without vertical scaling. The mathematical purist might suppose that selection of any single-line curve would imply the ability to pick out a single uni-modal expectation with a high degree of at least quasi-certainty, but it was not our intention to straight-jacket respondents in that way; nor did

SALES PATHS





they interpret the question to require such a perception of the future.

Regardless of the probability structure of expectations (which was also explored), few except the most inarticulate had any difficulty in expressing their anticipations in directional terms, or even in choosing, for example, between curves b and c. Among the results in responses to these questions were the following:

- a. 1957 predictions of long-term decline in sales were fully predictive of the termination of East Kentucky operations over the subsequent decade with only one exception.

The exception was a sawmilling enterprise that expected to curtail operations in some parts of the mountains with the depletion of supplies, and selected curve g. All woodprocessing entrepreneurs predicting sales declines over the decade following 1957 were sawmill operators and/or heads of mountain lumber concentration yards; they totaled nine cases, or 14 per cent of the woodprocessors from whom this information was obtained in 1957. Several small entrepreneurs in other industries also predicted declining sales from mountain plants and in fact dropped out either entirely or from operations in the mountains. Only two of the thirty-four wood processors who were in business for the entire period 1957 to 1966 described the prior decade as one characterized by long-term declines in sales, or predicted such declines for the future.

- b. The proportions of sawmills and of pallet and stave mills expecting no change in sales was much greater than in other products or industries; this characterized both the 1957 and the 1966 projections.

There can be no doubt whatsoever, in the light of other characteristics of

these firms, that in 1957 especially the "no change" responses frequently implied simply no attempt to forecast at all. This implied also no effort to expand markets or productive capacity. In many cases this response was associated with an essentially "as it comes" attitude, not only with respect to the absence of any sort of forecasting as a basis for action, but with respect to virtually every aspect of the business. In a few somewhat similar cases it implied a deliberate policy for the future that was essentially non-entrepreneurial, accompanied by comments such as "why get ulcers?" On the other hand, anticipation of no long-term change in scale of operations was sometimes backed up by carefully considered judgments concerning optimum size relative to managerial capacity, and the substantial changes in management organization and control that further expansion would require. Such evaluations sometimes backed up a summary statement such as "We could probably sell more, but we are the right size now."

Over-all, among the 1957 entrepreneurs predicting "no change" there was a higher non-survival rate than among those predicting increases in sales, but this was attributable primarily to the sawmills among wood processors. Moreover, numbers of non-wood enterprisers of 1957 who chose the horizontal sales outlook curve were too few to draw any quantitative inferences.

- c. The predominant pattern among all wood and all other manufacturers was anticipation of future sales increases, whether looking forward from 1957 or from 1966, and this was also the predominant response with respect to long-term sales changes looking back to 1957 from 1966.

The proportions of total responses anticipating sales increases ranged upwards from two thirds among 1966 respondents in all categories excepting the sawmill operators (among whom reported past histories and predicted future ones were in about even proportions as between no change and rising sales). The ratios of "up" to "no change" responses were slightly higher in 1957, and were more interesting; respondents more frequently selected curves other than b, and reasons for choice of other variants were more often elaborated in terms of both the plans of the particular enterprise and changes going on in the competitive environment and/or technology of the industry.

- d. The 1957 respondents choosing one or another of the curves for rising sales in fact increased their investment in depreciable assets, whereas other respondents did not.

This association was clear-cut even excluding the non-survivors. Thus one in seven of the surviving wood processing enterprises in which depreciable assets in fact declined between 1955 and 1963 had looked forward to increasing sales as from 1957, whereas over two thirds of those that had expanded their investments in such equipment had anticipated long-term increases in sales. The associations for firms in other than wood processing were consistent with this finding, but less clear statistically because the numbers not expanding were too few to give reliable results. Associations with increased investments were closer than with ratios of 1963 to 1955 sales both because of the non-comparability of time periods (and lagged sales effects of investments), and because sales ratios for any two years contain a large element of random variability that is not so important

in comparing the cost value of fixed assets in one year relative to another.

- e. Although there was no clear relationship between anticipations of long-term future sales increase and present scale of operations for wood processors in 1957, there was a very clear positive association between scale and expected future increase in sales among the respondents in 1966.

This contrast is attributable to the fact that the 1957 situation was a highly unstable one for both the biggest and the smallest mountain wood processors, for reasons indicated on earlier pages. The 1966 pattern is more nearly an approximation to what might be expected in a steady-state overall growth situation, (assuming net non-operative supply constraints and markets that extend beyond the limits of the mountains). Again, these relationships were less clear outside of wood processing because so few of the firms not already eliminated even before 1957 were other than expansionary in their hopes and intents.

### 3. Markets and marketing efforts

Most (not quite all) of the mountain manufacturers other than wood processors and apparel manufacturers produced almost entirely for local markets. Though some of the apparel establishments located in the mountains produced for markets throughout the midwest or even of national scope, those that were genuinely under local control were too few for useful statistical analysis of market scope and marketing methods. The analysis of marketing range and practices was therefore limited to the dominant export among locally operated manufacturers--which is of course wood processing.



Skipping over the details of that analysis, the scope of the markets may be indicated by considering proportions of enterprises selling to customers that were decidedly local (within 100 miles), at one extreme, and those marketing their products beyond adjacent or other Appalachian states at the other. (The few who sold to traveling buyers only were counted as local.) As of 1966, after a <sup>decade's</sup> elimination of the smallest and most highly localized sawmills, four fifths of the wood processors were in the first decidedly local category, just under one fifth went beyond Appalachia to serve customers over a wider area.

Similarly collapsing more detailed data concerning marketing methods, firms were classified as passive or active; the former made no special effort to reach customers, whereas the latter engaged in active endeavors to reach new customers and expand their markets. As of 1966, 15 per cent of the sawmill operators and two thirds of the other wood processors were classified as active. There was a systematic relationship between scale and degree of marketing activity. Taking sales of \$200,000 as the breaking point, 15 per cent of the firms under this level and 55 per cent of those above it were active marketers. Proportions were similar when the size break was at \$200,000 in cost value of depreciable equipment.

#### 4. Structures of sales expectations

Taking the responses on the sales curves as a starting point, a series of questions were posed concerning how large an increase in sales relative to present output the respondent was visualizing, how high or how low sales

would have to go to "surprise him," and how he thought about these matters in various decision contexts. Analysis separated long-run from short-run decisions. Comments here will be confined to the long-term expectation structures.

Though dating back to origins many decades old, a proliferation and refinement of theories of decision-making in the face of various types of risk and uncertainty characterized the post-war decade and is currently attracting renewed attention. All of these models, even Shackle's "potential surprise" approach, involve some form of probability concept as reflected in the mind of the decision-maker--that is, some sort of probability structure of expectations with regard to future profit prospects and the factors determining profits. All involve also some assumption or set of assumptions concerning foci of interest in the process of implementing expectations with action, including preference functions with respect to safety margins or gambling propensities. In the present research attention was concentrated on expectation structures with respect to outputs (or sales, holding prices constant), with only limited attention to expectation structures relating to other parameters or to profit rates. It should be noted, however, that expectation structures with respect to output are themselves derivative from a complex mixture of anticipations relating to demand, supply and cost conditions. We are dealing with a complex phenomenon, not prediction of a single future parameter taken in isolation.

Analysis of the interviews led to classification of sales or output expectation structures in six groups.

(1) First, there were those whose expectations could hardly be said to have a structure. Rather, the future was a general haze. There was no attempt to look ahead, and things moved along "as it comes." As we should expect, there was a clear negative association between scale of enterprise and proportions classified in this expectation-structure category, and by 1966 such respondents had been almost (not quite) eliminated. Among 1957 wood processors, proportions ranged from a third or more categorized type 1, or "general haze" among the smallest firms to one out of ten at the top.

(2) Type 2 structures had a single modal value only. Firms classified in this category were of two distinct kinds. One began with careful forecasting which was integrated into decision-making; the focus on a single modal value in taking action was a deliberate simplifying device consistent with Modigliani's use of a single as-if-certain value in planful decision-making. The other appeared in enterprises that attempted relatively little forecasting, and the use of some modal value was in most instances a rudimentary projection of past experience; usually it went along with assumptions of no changes in sales, constant productive capacity, and long-term operations at normal capacity levels. The latter were slightly the more frequent in 1957, but the less frequent in 1966.

(3) The third type of expectation structure is best described as a

band with focal outer limits. This was a prevalent structure in the context of short-run decisions, but it characterized many long-term perspectives as well. This type is an especially interesting one. Actually, even with the small numbers of cases involved in this study it appeared in two distinctive sub-variants that may be related on the one hand to Shackle's potential surprise theory and on the other to Simon's adaptive behavior. In practice the two approaches were sometimes combined, and the combination was not merely fortuitous, despite the differences in theoretical approaches--which are quite distinct. The "adaptive behavior" approach, coordinate also with Modigliani's concept of "conditional parameters," sets certain tolerance limits, defining a range within which no major shift of policy would be required but outside of which critical decisions would be necessary. If forecasts were such that deviations beyond these limits seem exceedingly unlikely, the necessary requirements for present action are fulfilled and there is no present need to look further. The focal limits are then set not by the total expectation pattern but by the forecasting requirements of present action, and they may fall well within Shackle's focal points. On the other hand, the potential surprise construct becomes the relevant one in either of two circumstances: (a) the likelihood that uncontrollable changes (in this case of sales opportunities) will lie outside of the critical limits is too great to be ignored, or (2) there is deliberate intent to push through the upper limit to a new position that, if realized, would require major further policy decisions. Under such circumstances the planful entrepreneur will consider possibilities out to surprise limits in their possible relevance to his first moves.

4. Expectation structure Type 4, the bi-modal contingent forecast, might be regarded as essentially an elaboration of the simple modal pattern, despite its superficial appearance of similarity to Type 3. In Type 4 cases the underlying projection is not a modal band but two sharply separated most likely prospects with a low probability for intermediate values. This implies a clear-cut dichotomy contingent on other, usually specified, eventualities.

5. Fifth are enterprisers whose sales expectation structures were best represented as a modal value plus an open-end upper extension of potentials. These were optimistic and expansionary entrepreneurs. The modal value tended to be an estimate of prospective growth in the near future, and at the same time a minimal goal of current planning.

6. Finally, a very few respondents specified both modal values and lower and upper focal points or surprise limits, suggesting something like a full probability model.

The very fact that these distinctive response patterns emerged quite clearly in both the 1957 and the 1966 interviews is in itself an interesting finding. Setting aside the first type, which was a "general haze" (or no expectation structure at all), some of the frequencies and the correlates of classification in one or another type are worth comment.

- a. Notably lacking were any instances of focus on minimal values in which there was not simultaneously attention to optimistic prognoses, nor was there any instance in which it was possible to identify conscious discounting of modal projections to allow for a negative attitude toward risk.
- b. Respondents classified in Type 5 (modal plus upper open end) were exceptional among wood processors in both 1957 and 1966, but accounted for a fourth of respondents in other industries in 1957.

- c. Responses of Type 6 (modal value plus both upper and lower focal limits) occurred only among the 1966 responses and in industries other than wood processing--excepting two cases in the 1957 wood processing interviews.

These three observations are inter-related. Both the Type 5 and the Type 6 responses characterized middle-sized or larger firms with expansionist anticipations, but such was most emphatically the case among those classified in Type 5. There was unquestionably a disinclination to "talk out loud" about unfavorable possibilities that would prevent realization of the modal anticipations set out essentially as goal minima by the Type 5 respondents, but they were characterized also by a decided asymmetry of outlook.

- d. There was a marked shift between 1957 and 1966 in the distribution of sales expectation structures among wood processors.

This shift was due in part to the fall-out of those classified in Type 1 in 1957, but that was by no means the whole story. Firms that were classified in Type 2 (single modal values) accounted for almost a fourth of the 1957 wood processors, and were concentrated primarily among the larger enterprises, but such patterns had virtually disappeared in the 1966 follow-ups of woodprocessors, though they turned up for a fifth of the respondents in other industries. This shift among the woodprocessors reflected changes in the decision environment and the types of decisions that were of most concern to respondents at the time of the interview. Unimodal expectation structures were most appropriate when the parameters relevant to the long-term decisions of immediate concern to respondents were easily

predicted or within their control; such happened to be the case for the bigger woodprocessors classified in Type 2 in 1957, primarily because of their concern with timber supply prospects at that time.

- e. Among entrepreneurs in industries other than wood-processing there was a high correlation between 1957 and 1966 expectation structures for firms active in both years.

The association was not exact, of course, and there were also modifications of the distributions of responses with changes in composition of the samples. Thus, whereas Types 2, 3, and 5 accounted for three fourths of the 1957 responses among enterprises in industries other than wood processing, the remainder being scattered over Types 1, 4 and 6, by 1966 there was a nearly even distribution of responses over all categories except Type 1.

Summing up, it is abundantly clear that no sweeping generalizations concerning how these entrepreneurs perceive the future and relate those perceptions and their decisions <sup>are valid</sup> / . It is also clear that setting Type 1 aside, the smaller enterprises and those manifesting the least sophistication and the shortest maximal time horizons were the most likely to perceive future events in a band with outer focal limits (that is, to fall in Type 3), though we cannot assert that all those categorized in Type 3 were small, or took narrowly circumscribed views of the future. Turning this around, the larger and the more successful enterprises were characterized by expectation structures that included, even if they were not confined to, modal projections (or bi-modal contingent ones) that had definite relevance to long-term decisions. Those that were most expansionist in orientation were the most inclined to supplement their modal

projections with consideration of a wider range of possibilities and associated strategy implications.

#### 5. Rates of return on investment

The attempt to identify either realized rates of return on investments in the business or subjective views of those rates of return was limited to the 1957 sample of wood processors, and necessarily to the more sophisticated among them only. Even then, the whole process involved in such estimation has an artificial quality; there is no getting around the problem of sorting out that component of gross entrepreneurial incomes that should be regarded as opportunity costs of the services of the human capital embodied in the entrepreneur himself. No matter how shrewd he may be, the mountain manufacturer--quite correctly--does not think in terms of rates of return on total or equity funds invested in the business. The important thing economically is what sort of living a man makes out of the business as a whole. This does not mean that no accounting is taken of returns to investments. On the contrary, these businessmen were "good economists" in that the relevant question for action decisions was focused on incremental returns; all the reasonably planful businessmen thought in this way, even though they did not talk in the nomenclature of the economist's marginal analysis. Skipping over the methods and the many caveats that are laid out in the presentation of this analysis in Chapter 7 of Monograph I, its main findings may be summed up briefly:

- a. Modal rather than mathematical-expectation estimates of profit rates seemed to characterize the most successful and/or planful firms.



- b. Vague belief in better-times-ahead on the average appeared in responses that might conceivably have been regarded as subjective "mathematical expectations." These characterized firms with unambiguously poor profit histories, and were frequently unrealistic rationalizations.

### Investment Attitudes

Investment attitudes were analyzed along two major vectors:

attitudes or propensities toward growth, which will here be termed "expansionism," and attitudes toward risk-taking. Neither of these is a simple uni-dimensional concept, however. Indeed, though we made some attempt at rank ordering, one of the most interesting aspects of our findings was what they revealed in cross-cutting patterns of attitudes that did not fit tidily into a single continuum. This was most sharply evidenced in the analysis of risk attitudes, which was undertaken in 1957 only.

#### 1. Expansionism attitude ranks

There are at least three distinct ways in which "expansionism" might have been defined. The first would have identified it with observed growth histories. A second definition, much more difficult to operationalize, would predict the likelihood and extent of future growth. Although such growth will presumably have at least some association with entrepreneurial attitudes toward growth, those attitudes and the likelihood of their successful implementation are by no means the same. To take an extreme but realistic example, an over-optimistic businessman whose affairs are already in serious financial disarray may have highly expansionist attitudes and intentions and may express these both emphatically

and in quite specific terms. He would be rated to the expansionist end of an attitude ranking, but we might nevertheless judge that his chances of expanding in fact were very slim indeed, even should he manage to survive. The expansionism attitude ranks developed in this research did indeed have relevance for prediction, but only as they could be related to other characteristics of the firm and factors in the environment.

The bases for establishment of a respondent's expansionism attitude rank are explained in detail in the chapter on Investment Attitudes, (Monograph I). The 1957 procedure was complex, it drew upon all relevant parts of the interview, and finally located firms <sup>a continuum</sup> along/by a method of paired comparisons. There were rather clear breaking points in the continuum, however, and the most reliable and interesting results came from distinguishing groups along that scale rather than from the use of rank values. In 1966 we dispensed with the detailed rankings, going directly to six groupings, which are further collapsed into three categories for purposes of this summary: (1) expansionist; (2) intermediate; (3) static and contracting. Principal findings were as follows:

- a. In most industry categories the proportions classified as (3), static or contracting, were smaller in 1966 than in 1957.

The change in this direction was most striking not among the wood processors (where the drop was only from 33 to 28 per cent), but among food and apparel enterprises. The latter had been predominantly static or contracting as of 1957, but a combination of fall-outs and of changes in market situation had altered that pattern by 1966, when they concentrated

in the intermediate categories. Exceptions to the above generalization were the metal processing and electrical equipment manufacturers and firms engaged in flooring and other kiln processing activities, but the numbers involved in shifts to category (3) were small.

- b. Genuinely expansionist orientations were the exception among saw, pallet and stave mills and among apparel manufacturers in both 1957 and 1966.

Proportions for the saw, pallet and stave mills were 25 per cent in 1957, 21 per cent in 1966. Only eight apparel firms qualified for a rating in 1957, and only seven in 1966 ; in both years just one firm rated expansionist.

- c. Other wood processors were decidedly expansionist in their outlooks as of 1957 (two thirds were in the expansionist category); they were only slightly, and insignificantly, less expansionary as of 1966.
- d. Food processors were clearly dichotomous in outlook as of 1957, when eight of fifteen respondents rated category (1), one was in category (2) and the other six in category (3). Only seven remained eligible for our 1966 sample, and of these three were expansionist, three in the intermediate category, one in category (3) by 1966.

A decade of change in the economic ecology of food processing, already manifest from the perspective of 1957, had eliminated all but one of the initial firms not clearly oriented to growth, and the one exception had been revitalized over the decade by a change of leadership. The marked change in the distribution of growth attitudes among the 1966 as against the 1957 food processors reflects this readjustment process, already completed by 1966.

- e. A strong 1957 growth orientation among the metal working and electrical equipment firms had partially receded by 1966.

The flush of growth in these activities that characterized the late 1950's has clearly passed, and a sifting process may be operating. Some have trimmed their ambitions or pulled back as either external limitations or managerial incompetence (or both) have taken the glow out of the future. Nevertheless, among the seven new plus old firms there were three highly oriented to growth as from 1966.

2. Some correlates of expansionism  
attitude ranks among wood processors

How far the expansionism ranks were associated with other attributes of the firms studied and their entrepreneurs was systematically explored. The principal results of those explorations for the wood processors were the following:

- a. In general, the larger the enterprise the more expansionist were the attitudes of the enterpriser, in both 1957 and 1966.

This relationship was revealed most unambiguously when the measure of size was maximum cost value of depreciable assets for 1952-55 and for 1959-63 respectively. In fact all of the smallest firms rated as static (though not as contracting) in both years. So did a third to a half of firms in the middle size ranges. The largest firms were preponderantly expansionist, despite the presence in 1957 of several that were planning liquidation and were therefore counted in the "contracting" category.

- b. Among the tidiest relationships (definitely tidier than the associations with size) were the relationships between extent of debt financing and ratings with regard to expansionism.

This was not attributable to the use of the financial data in arriving at the expansionism attitude ratings; on the contrary, those ratings were made on the basis of the interview only, and without reference to financial statements (written or oral). It is hardly a surprising relationship, of course. Indeed, if it had not shown up the attitude rankings themselves would certainly have been suspect.

- c. There were moderate but unquestionably significant associations between actual expansion in years prior to the interview and expansionist orientations toward the future, again in both 1957 and 1966.

Again, this association (with prior increases in sales and in depreciable assets) was independent of the basis of ranking on expansionist attitudes. It showed up more sharply in the 1966 than in the 1957 assessments. In 1957 it discriminated most clearly in proportions in the static or contracting category on expansionism, whereas in 1966 there was an equally sharp differentiation at the expansionist end of the scale.

- d. For 1957 there was a decided contrast between men whose sons were already in the business, or who hoped their sons would soon be part of it on the one hand, those who had no such hopes or plans on the other ; the former were decidedly the more expansionist in attitudes,

This is of course the pattern we should expect, and it was already anticipated in discussing expectation structures. Such a relationship does not show up as clearly in the 1966 data primarily because of correlations between calendar cycles in wood processing history and the associated age-cycling of inter-generation transfers in the mountain wood processing industry.

- e. Although associations between age and expansionist attitudes are in the direction to be expected, the associations are only moderate, and they shifted considerably between 1957 and 1966.

This is of course associated with the same phenomena remarked under point d. There has been more stability in the orientations of particular cohorts of men as they age than in the behavior of designated age categories of entrepreneurs as the men in those age groups change.

- f. There was very little correlation between survival rates from 1957 to 1966 and the expansionist orientations of 1957 respondents.

Actually the fall-out rate was as high among those classified in the highest expansionism attitude classes as among those in the static and contracting group on the attitude rankings. This is no surprise. For one thing, men who retired or died included some who were dynamic in their attitudes to the end. Furthermore, the expansionist respondents included not only planful entrepreneurs who were building for the future but also the unplanful congenial optimists who were busily losing money. (This phenomenon goes along with the "gold in them hills" element of mountain life, though it is of course not unique to mountain wood processors or to mountain enterprisers more generally.)

- g. Overall, there was an unambiguous positive association between expansionism and the scope of the enterpriser's contacts and sophistication, nevertheless.

Nowhere did this come out more clearly than in associations between expansionism and both the scope of markets and marketing methods. Thus in 1960 only one out of the eleven woodprocessors whose customers were

confined to a radius of less than one hundred miles was classed in the expansionist attitude category, while at the other extreme all of the six who sold in national markets were highly expansionist; the others were spread over the various expansionism rankings. Turning to marketing methods, the sharpest distinction is in the proportion categorized static or contracting; such men were common among those who were inactive in marketing, whereas none of those whose marketing methods were in any degree active were so categorized. The proportions ranked expansionist were 14 per cent among the passive and 57 per cent among the active marketers.

3. Characteristics of expansionism groups among firms in other than wood processing

Expansionism ranks as of 1957 among firms in industries other than wood processing reflected the mixture of situations in those various industries already noted at several points in this report. Given the small sample (1957 rankings were obtained on only 19 such firms), few reliable statistical associations could have been expected in any case, but in addition external conditions among the various industries dominated the picture. There was virtually zero association between expansionism ranks as of 1957 and any of the measures of size. Degree of indebtedness did come through with the expected pattern. Thus:

- a. The enterprises reporting little or nothing in interest payments were spread evenly among the expansionism ranks, whereas seven of the eight with more substantial 1955 indebtedness were in the highest expansionism ranks.

The associations between expansionism ranks and other characteristics were clearer in 1966. However, though we had a slightly larger

sample of rated enterprises--in this case 26 firms--comparisons requiring tax data were not possible for the newer firms.

- b. ~~There was~~ no indication of greater expansionist leanings among the new relative to the older enterprises.

Of the seventeen carrying over from 1957, a majority were now intermediate in expansionism, but six were highly expansionist and only one rated static. Among the new firms the spread was even over the expansionism groups. Examination of the individual cases suggests that this is attributable only in part to the initial survival problem of new firms; those rated static seem likely to remain so, in any case.

- c. The youngest men were the least expansionist in 1966.

Of the six enterprisers under 40 years of age, none ranked in the high group on expansionism, and two were classed as static in orientation. Above age 40 there was no further age differentiation; for both those in their forties and those over fifty years of age, one out of nine was static, four out of nine were expansionist. The explanation of this reversal of what might have been anticipated with age is clearly in the kinds of enterprises that the younger men could head despite their lack of experience. Despite common elements that reflect their mountain location, the sample of non-wood enterprises is decidedly heterogeneous in its make up--even more so than that of the wood processors.

- d. There was a definite positive association between 1966 expansionism ranks and scale of enterprise.

The best indicator for this is the maximum size index over the period 1952 to 1963 because it picks up all the cases and uses all the size information



available on them. There were just four firms in the smallest size categories (1, 2, 3); none of these was expansionist, and three were static or contracting. Among the eight firms in the intermediate size brackets, three were expansionist, three intermediate in this respect, and two static or contracting. At the top, the fourteen largest enterprises divided themselves almost evenly between expansionist (6 cases) and intermediate (8 cases), with none in the static or contracting ranks.

#### 4. Risk attitudes

That orientation to growth is a significant and major dimension of genuine entrepreneurship may be taken as virtually axiomatic. It is so almost by definition, though this does not preclude withdrawal from some activities or locations--indeed, effective entrepreneurship may require exactly that. How important orientation to risk taking may be as a quality of entrepreneurship is quite another matter. In the 1957 study a systematic attempt was made to identify risk attitudes and if possible to scale them; results were more illuminating in ways that had not been anticipated than in ways initially intended.

The initial problem was to construct a research instrument that could cut through the diversities of the complex realities that condition responses of small businessmen to provide data that could be fitted into simplified theoretical models, yet be meaningful to the respondents. After several preliminary trials with alternative lay-outs (in interviews with Kentucky wood processors elsewhere than in the mountains), we settled

on the use of five "investment-choice cards." The first three of the cards gave a modal rate of return and minimal and maximal potential surprise limits in the rate of return: "You would surprised at a rate of more than \_\_\_\_\_ or less than \_\_\_\_\_." The last two cards specified three rates and the odds of realizing each.

One of the problems that became very clear in trial tests was the necessity of a clear specification of the availability of funds to invest. Without a specification, too many other considerations influenced choices, and comparability in the measurement of attitudes toward chance-taking was lost. This was inevitable, since respondents typically thought in terms of specific concrete situations, including prospects for the business, production technologies, and current financial situation. This problem was resolved by introduction of a hypothetical "gift," the magnitude of which was geared to the experience horizon of the respondent. (We took approximately half his net worth or a minimum of \$25,000).

A basic problem that remained unresolved was the role of investment in the business versus other investments. Some respondents had no opportunity horizons beyond their business activities and little if any awareness of what sort of return they received on investments in their own enterprises; these were lumped together with other inadequate responses in "risk attitude Group VII." Other respondents viewed these choices as the balancing of safety investments against risks entailed in their businesses. Cases in which the choices were specifications concerning the actual or the subjectively perceived risk situation in the business studied were

exceptional. Nevertheless, as interviewing proceeded, we found that we were becoming increasingly successful at predicting the general nature of response to the investment choice cards on the basis of what had already been learned during the interview about the way the respondent viewed the future and conducted his business.

Although the investment choice cards involved an abstraction from the concrete situation of the particular business, responses were not by any means abstract. There was an almost universal tendency to translate the choice situations into possible actual ones within the horizon of respondents--government bonds, local real estate, gambles on gas wells, business cost-plus contracts versus normal marketing procedures, or taking a flyer on new lines etc. versus conservative adherence to tried and habitual business behavior. In some instances this went so far as to involve a basic denial of the hypothetical choice situation when potential maximum rates were set too high even with small odds. This was not as serious in its effects on choices as another aspect of "concretism," however. There was a tendency on the part of some respondents to think of two kinds of odds--chances for an "outsider" who did not have special knowledge of a situation, and those chances as modified by esoteric knowledge. In most cases this difficulty could be overcome by "adding" a question, to respecify taking such esoteric knowledge into account. In the end it probably did not significantly bias responses toward the higher risk choices, but it did bring out very clearly the sharp contrast some of the

least sophisticated mountain men drew between taking a definite gamble on familiar ground (as local gas explorations) and chancing their fates in the hands of "foreign" stock brokers who might "cheat them." (This is also consistent with a Friedman-Savage utility function  $\text{vis-à-vis}$  risk-taking and gambling preferences, but to press it that far would hardly be justified.)

It was clear that most of the respondents recognized capital appreciation as well as annual receipts as composing part of the "rate of return" on their investments, though only a few were explicitly analytical in their comments about this. However, a few failed to recognize that extremely low annual rates of return implied an associated loss in capital value of the investments. This was not true of the few respondents who thought in terms of investment in national corporate securities. Without exception the latter were highly sophisticated on this score, and proceeded to analyze choices they had in fact made by translating rates of return to take account of appreciation or depreciation of market values of their stocks. (In fact, all respondents who had a margin of personal assets over and above what they **needed in their** businesses answered the investment choice cards by reference to what they had in fact done--whether in the stock market or in local real estate, oil and gas wells, etc.)

The highly **ambiguous** phrase "would be surprised" was used deliberately in defining the maxima and minima on the first three cards. In most cases this was accepted without question; only the most sophisticated asked what it meant. When this occurred the interviewers were **evasive**, turning the question back on the respondent with a "what sort of situation

would surprise you?" Where this seemed to frustrate response the order of presentation of the cards was reversed, taking the last two cards first; after that such <sup>respondents</sup> had no trouble going on to the first three cards. However, for most of the enterprisers studied, thinking in terms of odds seemed to be something of a strain, and became meaningful only after going through a kind of learning process in responding to the first three sets of choices. In no case did a wood processor ask initially for a definition of what was meant by what would cause surprise.

The question of what this phrase meant to the respondent was asked after completion of the cards in all cases in which the respondent himself had not previously brought it up. The first reaction was to say, in surprise at the question, "it would just surprise me." "Surprise had definite meaning, but it could not be translated into odds. Instead, it tended to be interpreted in terms of concrete examples of eventualities that would cause surprise--things just "too unlikely" to take into account in what you do, but the "too" unlikely remained unspecified.

In analyzing responses to the investment choice cards, firms were grouped in terms of response patterns, and roughly arrayed by degree of propensity to take risks. However, there is more than one dimension of risk attitudes involved in these groupings, and only at the extremes is the scaling unambiguous. Group I were unambiguously conservative; these men put all their money in the "safest" choice in every case, no matter how low the associated mean or modal rate of return. Group II respondents all put some of their money in the safest choice and then moved down step by step

to choices involving somewhat greater risk; firms are easily enough scaled with respect to risk propensities within Group II, but comparisons across Groups II, III and IV are more awkward. Group III respondents split their choices to take some of the safest and some of the real gambles; having established security, they saw taking a chance with the rest as a luxury to be envisaged with considerable delight. Group IV respondents were more inclined to avoid the safest choices when modal rates of return were very low, but neither did they show interest in the gambles. In many respects these men were more like those in Group II than those in Groups III or V; together with the Group II respondents, they were generally the most sophisticated and knowledgeable beyond the boundaries of the Kentucky mountains. Men whose choices placed them in Groups V and VI were all definitely risk takers. Gambles had characterized the actual investment behavior of all those respondents in these two groups who had had resources available for investment outside of their businesses. There was in these cases no evidence of a desire to balance business risks by safety investments otherwise; Groups V and VI were distinguished only by the extent of the concentration of choices on the highest risk alternatives. As noted previously, Group VII is respondents who were quite unable to handle this type of question. The respondents included in the risk analysis included a few located outside of the mountains though controlling establishments with mountain locations. They are included in the summary distributions that follow.

| Industry  | Total<br>Questioned | Highly<br>Conservative:<br>Group I | Intermediate<br>and Mixed<br>Groups |                      | Risk<br>Takers:<br>Groups<br>V and VI | Group VII<br>Unable to<br>Handle the<br>Question |
|---|---------------------|------------------------------------|-------------------------------------|----------------------|---------------------------------------|--|
|   |                     |                                    | Group II                            | Groups<br>III and IV |                                       |  |
| Saw, pallet and stave mills                                       | 30                  | 4                                  | 5                                   | 9                    | 4                                     | 7  |
| Flooring, other kiln processing,<br>miscellaneous wood processing | 13                  | 1                                  | 1                                   | 4                    | 5                                     | 2  |
| Retail lumber and concentration<br>yards                          | 10                  | 1                                  | 3                                   | 3                    | -                                     | 3  |
| Food processors   | 9                   | 1                                  | 2                                   | 4                    | 1                                     | -  |
| Coal servicing  | 4                   | -                                  | -                                   | 2                    | 2                                     | -  |
| Apparel manufacturing   | 8                   | 3                                  | 4                                   | 1                    | -                                     | -  |

Among those potentially eligible for inclusion in the 1966 follow-up study, there was no significant difference in survival rates among these risk attitude groups except that among wood processors respondents in Group IV (understandingly) and in Group VI (less predictably) had no fall-outs at all. The only systematic relationship with scale of enterprise was the negative association between size and proportions in Group VII, and this was clearly evident only when the size measure was cost value of depreciable assets. Ratios of interest to sales or entrepreneurial incomes bore very little relationship to risk card choices for a very simple reason; a few of the inveterate gamblers aside, there was inevitably a bias against risk choices among those who were already taking the biggest chances with borrowed funds; even the specification of a hypothetical gift over and above (after washing out) present indebtedness did not eliminate this problem. There was a marked positive relationship between gross investments over the period 1952-1955 and degree of risk orientation, however; this was evident systematically across all risk groups in order from I to VI.

Other characteristics that were related in a reasonably clearcut fashion to any aspect of the risk attitude groupings were all characteristics of the respondent or his perceptions, not data concerning the economic characteristics or history of the firm. Those who were approached on the risk analysis but for one reason or another seemed unable to handle it were distinctive in several ways. Almost all of the respondents who had no incomes from sources other than their businesses were in Group VII, as against minorities of those with other income sources as well. Among



men who had not gone beyond high school (whether or not they had completed high school) roughly 30 per cent were in risk Group VII, whereas none of those who had gone beyond high school completion failed to give adequate responses to the investment choice cards. Again, a third of those who were passive only with respect to their marketing methods were in Group VII as against under ten per cent of those who were active in their search for customers. Throughout, the Group VII respondents clearly set themselves off from the other manufacturers in their distinctly local and very limited horizons, education and experience.

Risk Group I was distinctive among the woodprocessors in that only men over 50 placed themselves in this group, and most of the respondents in Group I were 60 years of age or more. Risk Groups V and VI, by contrast, included none of the men over sixty, though they encompassed the rest of the age range. Groups V and VI were distinctive also in their educational selectivity. Almost half of the woodprocessors who had gone beyond high school completion were in those risk groups, but there was only one high school graduate and one man with less than high school completion who appeared in that risk category, even though men who had not gone beyond high school made up a third of those included in the risk attitude analysis.

In view of the personal attributes just discussed, and the sharp contrast between those who could not or did not handle the investment-choice cards satisfactorily on the one hand, those who leaned toward the more risky choices on the other, the associations between risk groups

and 1957 expansionism ratings among wood processors are particularly interesting. The most risk oriented were also the most frequently rated as high in expansionism attitudes, but next to them in this respect came those who had been put in risk Group VII; only one of those from the risk-oriented category (Groups V and VI) and one from Group VII was rated in the static or contracting category with respect to expansionism. On the other hand, men classified in the third category on 1957 expansionism, as static or contracting, appeared in all the other risk attitude groups; accounting for just under half of their members. Even recognizing that these expansionism attitude distributions reflected in part special conditions of the industry, the place and the time (as in a degree they always must), it is quite evident that several aspects of what goes to make up entrepreneurship, or a lack thereof, are at play here.

What is important is not just readiness to take chances, but rather the way in which such a readiness feeds back into business decisions, the knowledgeability and self assurance that may go along with risk orientations, and the tempering of readiness to gamble with judgment. (Indeed the most highly successful among the food processors who in fact enlarged their businesses substantially over the years after 1957 were neither highly conservative nor to the risk-taking extreme in responses on the investment-choice cards). Or again, what is important is not just ambitions to expand, but the tempering of those ambitions by knowledge, judgment and the assurance that enables a man to take a considered risk as part of the dynamics of success. So far as entrepreneurship is concerned, it may

be that we would do better to analyze it by taking as the two major dimensions expansionism and planfulness, letting the risk orientations find their proper place within these two basic components of genuine, full-fledged entrepreneurship.

### Planfulness Ratings

In both the 1957 and the 1966 samples, planfulness ratings were made for each of the respondents interviewed. These were based entirely on what was learned in the interview, independently of data concerning firm size and success (or lack of it) in the histories of the firms--or for that matter of any other economic ventures undertaken by the individual entrepreneurs being rated. Both the early and recent interviews included a series of questions concerning investment decisions, shifts in product or product mix, marketing and buying procedures, and so on. We explored the kinds of information respondents used in these connections and how it was used, the extent and nature of forecasting and for what purposes,<sup>1</sup> provisions for future contingencies and the extent to which such contingencies were visualized, the precision with which the relevant decision parameters were selected out for attention, and so on. Questions were formulated to evoke specific answers relating to decisions actually taken in the recent past, problems under consideration at the moment, plans for the future and on what they were based. Growth per se was not

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<sup>1</sup>Degrees of formalization of knowledge organization and forecasting were not regarded as per se indicators of planfulness, however.

considered as a planfulness criterion; indeed, contraction and liquidation could be and sometimes were highly planful. The 1957 interviews were more intensive on these points, however, and provided a firmer basis for planfulness ratings.

Respondents were rated on a four-point scale, from the most planful to those evincing no planfulness whatsoever. Beginning at the bottom, there was no ambiguity about a rank of four; these were men abysmally devoid of any planfulness at all. They jogged along in a rut from day to day, taking things as they came without any attempt whatsoever to assess opportunities or analyze problems. There were seven such men among those rated in 1957, but they tended to fall by the wayside.<sup>1</sup> Those ranked three evidenced some modicum of planfulness, interpreting that term rather generously. These men displayed at least some minimal effort to assess conditions, prospects, and a narrow range of action alternatives. However, characterized as they were by either very limited horizons or lack of interest in the enterprise (not usually both), the "entrepreneurship" of these respondents was either quite rudimentary or verged on the senility that characterized several of the 1957 respondents in rank four.

The planfulness rating two represents essentially a fulcrum position. Respondents so ranked were genuine entrepreneurs with respect to knowledge organization, and in a few cases they were very dynamic and creative

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<sup>1</sup>A deliberate search would of course have unearthed others, but there can be no doubt that the universe of such operators has shrunk to insignificance over the past decade among manufacturers meeting the minimum size criteria for inclusion in our sample.

businessmen. However, they were only moderately sophisticated, and the scope of their deliberations in decision-making did not match that of respondents rated one. There were few cases in which we had any difficulty differentiating those ranked two from those ranked three, though we cannot preclude some bias associated with the personality of the respondent and his readiness to articulate his modes of thinking. All those rated two were quite articulate in these respects, but some rated three who were in fact very shrewd may have matched some more articulate men classed as two.

In most cases the top ranking of one, the most planful category, was again easily distinguished. Relative to other men in our study these were sophisticated businessmen who directed their intelligence to systematic, deliberate and discriminative assessments of alternative lines of action. These traits were clearly manifested throughout those parts of the interview dealing with their business decisions and prospects. Nevertheless, the range in degree of sophistication and creative entrepreneurship among those rated one was considerable. In a sample of businessmen drawn from a wider range and not constrained to local and hence, in this instance, relatively modest operations seen on a national scale, it would have been necessary to split rating one into two or more parts.

The 1957 ratings were made by Eowman and an assistant interviewer, those for 1966 were made by Plunkett, who did all the 1966 interviews. These two sets of ratings were entirely independent, and were based on interview data only; Plunkett did not see the 1957 interview reports or

ratings prior to making his 1966 assessments. The ratings in 1957 covered respondents in 79 firms, of which 57 were wood processors, 22 were in other industries. Those for 1966 covered respondents in 70 firms of which 44 were wood processors and 26 were in other industries. However, only 41 of the ratings were for the same firms in both years and only 22 of these referred to the same individuals. The distributions of ratings were as follows:

|                                      | Rating |    |    |   |
|--------------------------------------|--------|----|----|---|
|                                      | 1      | 2  | 3  | 4 |
| All 1957 cases                       | 17     | 27 | 27 | 8 |
| All 1966 cases                       | 21     | 26 | 21 | 2 |
| Cases rated in both years<br>(firms) |        |    |    |   |
| 1957 ratings                         | 10     | 13 | 11 | 2 |
| 1966 ratings                         | 13     | 15 | 12 | 1 |

Though three fourths of the ratings on identical individuals matched perfectly, the match was only 60 per cent (24 out of 41 cases) for firms; this difference reflects shifts in personnel interviewed both because of changes in the men responsible for direction of these firms and, in some cases, because one partner was interviewed in 1957, a different partner in 1966. In no case did ratings on the same individual deviate by more than one step, and in only one case (a very clear and striking change in a reorganized undertaking) was the difference in ratings of firms greater than one step. Nevertheless, the associations between planfulness ratings and other characteristics of the firm and its management were much clearer for 1957 than for 1966 so far as woodprocessors were

concerned. How far this is attributable to differences in reliability of the ratings, how far to a decreased dispersion in the 1966 distributions (with fewer in categories three and four) is not altogether clear, though both the decreased dispersion and the less complete basis for ratings worked against the 1966 evaluations. (Ratings of firms other than wood processors ran, from rating one to four, as follows: 6, 8, 8, 0 in 1957, and 11, 6, 8, 1 in 1966.)

### 1. Correlates of planfulness ratings

Some of the associations between planfulness ratings and other attributes are summarized for 1957 wood processors on pages 89a and 89b and for 1966 wood processors on page 89c. Parallel row items are numbered the same for the years, but the set for 1966 carries fewer items because some of the computations were not matched for the later years.

The main points of interest were as follows:

- a. Associations of planfulness with scale are evident enough for 1957 but do not show up against depreciable assets in 1966. (There were too few high entrepreneurial incomes in 1966 to permit comparisons on item 2.)
- b. Items 4, 5, 6, are of interest primarily as they display the significance of moderate mark-ups; very high ratios of entrepreneurial incomes to sales signal small and unstable relatively unplanful enterprises; this is evident in 1966 as well as in 1957, though less dramatically in the later year.
- c. There is no ambiguity about the 1957 associations of planfulness with growth achieved over the decade following the 1957 planfulness assessments (items 7 and 8).
- d. As of 1966, these measures are looking backward, to what was then past growth; we would have to wait another decade to see whether the 1966 planfulness ratings will prove





Percentage Distributions of Planfulness Ratings;  
1957 Woodprocessors with Designated Characteristics

|   | Planfulness Rating 1957 |    |      |     | Total |
|---|-------------------------|----|------|-----|-------|
|   | 1                       | 2  | 3, 4 | %   | N     |
| 1. Cost Value of Depreciable Assets<br>(1952-55 maximum)        |                         |    |      |     |       |
| Under \$50,000  | 11                      | 22 | 67   | 100 | 9     |
| \$200,000 and over  | 60                      | 20 | 20   | 100 | 5     |
| 2. Gross Entrepreneurial Income<br>(1952-55 mean)               |                         |    |      |     |       |
| Neg. and under \$3,000  | 8                       | 25 | 67   | 100 | 12    |
| \$30,000 and over   | 38                      | 38 | 25   | 100 | 8     |
| 3. Entrepreneurial Income per Capita<br>(1952-55 mean)          |                         |    |      |     |       |
| Neg and under \$3,000   | --                      | 36 | 64   | 100 | 11    |
| \$30,000 and over   | 60                      | 20 | 20   | 100 | 5     |
| 4. Adjusted Profit Rate on Sales<br>(1952-55 mean)              |                         |    |      |     |       |
| Neg. and under 1%   | --                      | 33 | 67   | 100 | 12    |
| 1% to 9%  | 50                      | 24 | 26   | 100 | 19    |
| 10% and over  | 25                      | 20 | 55   | 100 | 8     |
| 5. Entrepreneurial Income Percent<br>of Sales (1952-55 mean)    |                         |    |      |     |       |
| Neg., under 1% and over 10%                                     | --                      | 36 | 64   | 100 | 11    |
| Between 1% and 10%  | 30                      | 30 | 40   | 100 | 30    |
| 6. Entrepreneurial Income Percent of<br>Sales (1952-55 maximum) |                         |    |      |     |       |
| Neg., under 1% and over 10%                                     | --                      | 39 | 61   | 100 | 18    |
| Between 1% and 10%  | 32                      | 29 | 39   | 100 | 28    |
| 7. Cost Value of Depreciable Assets<br>1963/1955                |                         |    |      |     |       |
| Under 1.50  | --                      | 17 | 33   | 100 | 12    |
| 1.50 or more  | 41                      | 24 | 35   | 100 | 17    |
| 8. Change in Maximum Size Index,<br>1952 to 1963                |                         |    |      |     |       |
| Down  | 14                      | -- | 86   | 100 | 7     |
| Same  | 36                      | 19 | 45   | 100 | 11    |
| Up  | 29                      | 24 | 47   | 100 | 17    |

|   | Planfulness Rating 1957 |    |      |     | Total |
|---|-------------------------|----|------|-----|-------|
|   | 1                       | 2  | 3, 4 | %   | N     |
| 9. Range in Adjusted Profit Rate on Sales, 1952-55                          |                         |    |      |     |       |
| 0 - 3.9%  | 41                      | 41 | 17   | 100 | 17    |
| 4.0 - 9.9   | 25                      | 50 | 50   | 100 | 12    |
| 10.0 and over   | --                      | 27 | 73   | 100 | 11    |
| 10. Range in Entrepreneurial Income per Capita divided by its mean, 1952-55 |                         |    |      |     |       |
| 0 to 2.99   | 33                      | 30 | 37   | 100 | 27    |
| 3.00 and over   | --                      | 29 | 71   | 100 | 7     |
| Mean negative   | --                      | 20 | 80   | 100 | 5     |
| 11. Personal Income of Head of Firm, 1955                                   |                         |    |      |     |       |
| Under \$5,000   | --                      | 33 | 67   | 100 | 15    |
| 10,000 and over   | 39                      | 22 | 39   | 100 | 23    |
| 12. Maximum Functional Time Horizon, 1957                                   |                         |    |      |     |       |
| Under 5 years   | --                      | 33 | 67   | 100 | 15    |
| Over 5 years  | 47                      | 29 | 24   | 100 | 17    |
| 13. Reading of Trade Journals, 1957   |                         |    |      |     |       |
| Yes   | 47                      | 37 | 16   | 100 | 19    |
| No  | 3                       | 26 | 71   | 100 | 27    |
| 14. Systematic Analysis of National Economic Conditions, 1957               |                         |    |      |     |       |
| Yes   | 61                      | 24 | 15   | 100 | 13    |
| No  | 6                       | 33 | 61   | 100 | 33    |
| 15. Marketing Behavior  |                         |    |      |     |       |
| Passive   | 12                      | 24 | 64   | 100 | 25    |
| Active  | 21                      | 50 | 29   | 100 | 14    |
| 16. Education, 1957   |                         |    |      |     |       |
| Less than high school graduate  | 7                       | 13 | 80   | 100 | 15    |
| High school graduate  | 23                      | 54 | 23   | 100 | 13    |
| Beyond high school  | 33                      | 29 | 38   | 100 | 21    |
| 17. Age, 1957   |                         |    |      |     |       |
| Under 50  | 16                      | 36 | 48   | 100 | 25    |
| 50 and over   | 19                      | 47 | 34   | 100 | 26    |

Percentage Distributions of Planfulness Ratings;  
1966 Woodprocessors with Designated Characteristics

|   | Planfulness Rating 1966 |     |      | Total |     |
|---|-------------------------|-----|------|-------|-----|
|   | 1                       | 2   | 3, 4 | %     | N   |
| 1. Cost Value of Depreciable Assets,<br>1963                    |                         |     |      |       |     |
| Under \$50,000  | 29                      | 57  | 14   | 100   | 14  |
| \$200,000 and over  | 36                      | 28  | 36   | 100   | 11  |
| 5. Entrepreneurial Income Percent of<br>Sales (1959, 1963 mean) |                         |     |      |       |     |
| Neg., under 1% and over 10%                                     | 7                       | 43  | 50   | 100   | 14  |
| Between 1% and 10%  | 33                      | 33  | 33   | 100   | 15  |
| 7. Cost Value of Depreciable Assets<br>1963/1955                |                         |     |      |       |     |
| Under 1.50  | 22                      | 33  | 45   | 100   | 9   |
| 1.50 and over   | 23                      | 42  | 35   | 100   | 17  |
| 3. Change in Maximum Size Index,<br>1955 to 1963                |                         |     |      |       |     |
| Down  | (1)                     | (1) | (1)  | 100   | (3) |
| Same  | 17                      | 42  | 42   | 101   | 12  |
| Up  | 23                      | 38  | 38   | 99    | 13  |
| 11. Personal Income of Head of Firm,<br>1963                    |                         |     |      |       |     |
| Under \$5,000   | 12                      | 50  | 38   | 100   | 8   |
| \$10,000 and over   | 25                      | 38  | 38   | 101   | 16  |
| 12. Maximum Functional Time Horizon,<br>1966                    |                         |     |      |       |     |
| Under 5 years   | 12                      | 53  | 35   | 100   | 17  |
| Over 5 years  | 70                      | 20  | 10   | 100   | 10  |
| 15. Marketing Behavior  |                         |     |      |       |     |
| Passive   | 20                      | 35  | 45   | 100   | 20  |
| Active  | 24                      | 32  | 24   | 100   | 17  |
| 16. Education   |                         |     |      |       |     |
| Less than high school graduate                                  | 18                      | 45  | 36   | 99    | 11  |
| High school graduate  | 21                      | 43  | 36   | 100   | 14  |
| Beyond high school  | 36                      | 50  | 14   | 100   | 15  |
| 17. Age   |                         |     |      |       |     |
| Under 50  | 31                      | 46  | 23   | 100   | 26  |
| 50 and over   | 6                       | 47  | 47   | 100   | 17  |
| 18. Expansion (major) 1963-1966                                 |                         |     |      |       |     |
| Yes   | 33                      | 67  | --   | 100   | 15  |
| No  | 16                      | 36  | 48   | 100   | 25  |

predictive in this respect, but they bear only a loose relationship, if any, to 1955-1963 growth. On the other hand, when a more recent growth measure is used, as in item 18, the 1966 relationships come through clearly enough.

- e. High variability in profit rates (like excessively high mark-ups) characterizes firms with low rather than high planfulness ratings. This is displayed clearly in items 9 and 10 for 1957.
- f. There was no association between age and planfulness ratings in 1957, but among the 1966 wood processors the older men were the less planful.

This shift in the age correlates of respondents has been remarked earlier. It has in fact been striking. The older men of 1966 are men who in 1957 were supposedly in their prime years, but who did not show up at all impressively relative to their elders of that time. There is an education twist in this along with some accidents of particular calendar and age cycles in the history of a local industry; the oldest of the mountain manufacturers of 1957 included a higher proportion of reasonably educated men than were to be found in the middle age ranges of that date. But comments on education are better deferred for the moment.

## 2. Planfulness and expansionist attitudes in combination

A cross-tabulation of planfulness ratings against expansionist attitudes is both interesting conceptually (what would the cells mean if anything were in them?) and in what it can tell us of entrepreneurship among mountain manufacturers. Distributions for 1957 and for 1966 follow.

| Expansionism<br>Attitude Categories | Planfulness Ratings |    |    |   |      |    |   |   |
|-------------------------------------|---------------------|----|----|---|------|----|---|---|
|                                     | 1957                |    |    |   | 1966 |    |   |   |
|                                     | 1                   | 2  | 3  | 4 | 1    | 2  | 3 | 4 |
| 1 & 2. Expansionist                 | 12                  | 15 | 6  | 1 | 15   | 6  | - | - |
| 3 & 4. Intermediate                 | 2                   | 8  | 7  | 4 | 3    | 11 | 9 | 1 |
| 5. Static                           | -                   | 1  | 11 | 2 | -    | -  | 5 | 1 |
| 6. Contracting                      | 3                   | 1  | 4  | - | -    | 2  | 2 | - |

There are evident, and interesting, patterns in the distributions of cases in these tables. Planfulness and expansionism tend to go together. The most highly planful are rarely intermediate in expansionism, however; highly planful men tend also to be decisive, and the intermediate expansionism categories pick up some tendency to think and act with a little less than a firm grip on the wheel. It is no accident that in 1957 three respondents appeared in the highly planful contracting category, at the bottom left corner of the table. These men came under our purview because of the working out of the virgin timber stands that were being exploited in remote parts of the mountains at that time, though withdrawals of this kind are a recurrent aspect of planful entrepreneurship. We would have to ask whether, in (profitably) liquidating their East Kentucky operations, the men controlling these enterprises were shifting their energies elsewhere; if so we could not count them as sending in resignations from entrepreneurship. It is important to note, however, that planned contraction is a very different matter from either forced liquidation (even if anticipated)

or static plodding along in an habitual groove. The lower right-hand corners of these distributions are empty, and the opposite of the dynamic planful entrepreneurs are to be found mainly in the three cells adjacent to the lower right corner. What, in fact, lies back of these numbers in the real men and their enterprises seen in a human resource and economic development context?

### Entrepreneurship as a Development Phenomenon

The two main questions to which the initial study of local mountain manufacturers was directed at its inception in 1956 were: (1) To what extent would the decision-makers in these small firms exemplify one versus another of the expectation structures and modes of dealing with uncertainty presumed by alternative theories of business behavior under conditions of uncertainty? (2) To what extent were enterprises in this area looking forward to growth, stability or contractions of operations within East Kentucky, and what might this reveal and portend concerning mountain problems and prospects? However, it became increasingly evident that there were other equally or more important questions to which attention should be directed, questions that may be largely summed up in the conception of entrepreneurship as a development phenomenon. What, indeed, is entrepreneurship, what goes into the making of an entrepreneur, and how do these processes relate to local environments and to degrees and kinds of contact between the businessmen of an area and the wider economy in which if they are to be successful, most of them must

consciously operate? To answer this question we must first try to pull together what the mountain entrepreneurs really are like. In fact, in doing so we will also be taking a first step toward analyzing how, in a human development sense, they "are made."

1. Entrepreneurship types in the Kentucky mountains

At one extreme is a group that has been rapidly fading and that we made little attempt to seek out in our 1966 interviews, beyond determining that they are indeed ceasing to exist, not just becoming invisible. These are men who might be termed sub-entrepreneurs. They are men for whom the business is just a job, and their knowledge and economic opportunity horizons are exceedingly narrow. They are likely to be too small to be included in our samples unless they are sawmill operators, which increases numbers of employees relative to those found in businesses otherwise comparable. But some of the managers of cut-and-trim apparel firms would also have to be considered as belonging to this category, even though they have wider geographic experience and usually a little more "book learning."

Also on the fringe of entrepreneurship are a few incidental entrepreneurs whose main interests lie in other directions and who have become involved in a mountain manufacturing enterprise as a speculative game or as a public service to create jobs; however intelligent they may be, these men are not directing their main efforts to the business, and as often as not they turn out to be very poor businessmen indeed. A few have crept

into our samples, where they confound the quantitative measures, whatever they may accomplish otherwise. These, like the sub-entrepreneurs, we can set aside, noting only that they will not reach the highly planful class but that they could be found most anywhere in expansionism attitudes, depending upon the stage in their involvements at which we encounter them and how the business is faring.

Entrepreneurship might be said to be born, if a bit feebly, as soon as the small sawmill operator (or cut-and-trim apparel manager) tries to reach out on his own to improve production operations or marketing processes. He moves from the vicinity of the lower right hand corner of our table toward the middle. These men are constrained by limited schooling, an impoverished<sup>er</sup> cultural environment, modest ability and/or assessments of their own managerial competence to go further. They are not the only occupants of the cells of these tables defined by planfulness ratings of three and moderate expansionism. Men of all ages and schooling sometimes occupy this uncertain ground in which planfulness is rudimentary and direction of purpose and action often ill-advised; but these near-entrepreneurs are more typically men who did not complete high school, if they got so far as to attend it. The remarkable thing is not that most of the men who had not graduated from high school fell in planfulness categories three and four as of 1957, but rather that any of them could have been rated higher than that--in either 1957 or 1966 (See pages 89a to 89c.)

Moving from this position up on the expansionist scale we begin to



get real entrepreneurship in that orientations become more dynamic, but ability to plan or interest in planning a course of action remains deficient. There is no clear pattern of educational background in this range of attitudes and behavior.

In marked contrast with these men are those who are more planful (rating 2) but more cautious and constrained in their growth orientations. (To see this we would have to go back to the expansionism rankings themselves, instead of the collapsed categories used in this summarization.) This more cautious planfulness goes along with a modest appraisal of one's own entrepreneurial competence and a sense of inadequacy in educational background that is well justified by the facts. How far management extension programs can substitute remains an open question, but this is the kind of mountain businessman who would seem to be most ready to use such help once communication barriers are overcome.

The highly planful and those rated two on planfulness but in the expansionist categories on growth orientations are the most developed of the mountain entrepreneurs. As previously remarked, these men are decisive and articulate. Almost all had at least completed high school, and a majority had attended college. This points clearly to the limitations on development of entrepreneurship imposed by lack of formal schooling, even in the mountain environment. Talent and drive are only partial substitutes. But there has been scope for such substitution nonetheless.

This substitutability was dramatized by the men rated two on

planfulness, in the expansionist categories on expansionism, in 1957 especially. Their backgrounds in schooling run the gamut from those who stopped with eighth grade to men who went to college. Included in this group were the two most unambiguous examples of successful Shumpeterian entrepreneurship--men who combined technical inventiveness, the promoter's talent and inclination, and the capacity to carry this through into successful realization, at least for a time. Both had only eight years in school, but both had benefited also from experience in the military during World War II, which enlarged their awareness of life outside the hills and gave one of them much of his technical know-how. But the limitations of such substitutability are equally manifest in these case histories; in the perspective of 1968 it is evident that they are constrained by lack of the educational pre-requisites for steady continued entrepreneurial advance.

## 2. Businessmen as interstitial persons

The readiness of mountain people to take up any new idea that may have promise and to quickly imitate successful ventures is a striking feature of the local society that has been demonstrated again and again--from the days when stave manufacture spread over the area to the pallet manufacturing explosion (and the charcoal enterprises) of the middle 1950's right up to the present moment. From this point of view there is no deficiency in the readiness of the mountain men to go into economic action. The notion that the mountains are inhabited almost entirely by men caught in a fatalistic, lethargic poverty syndrome is one of the most distorted of

the many false images that have spread concerning Appalachia in general and the Kentucky mountains in particular.

But if this is so, and given the fact that we are dealing with a part of a nation, not a separate country, what keeps these businessmen in the mountains? For some a rudimentary economic answer might suffice; their limited schooling and experiential learning narrowly limits the alternatives available to them elsewhere. What little they know and understand is in and of the mountains, and bounded by them. For others there are no such constraints. The most interesting questions center on who succeeds and stays and why. Answers to these questions will key us into the processes of diffusion of entrepreneurial competence and the potential roles of local enterprises in the mountain economy of the future. Combining the analysis of economic histories of the mountain manufacturers, their decision processes, their contacts and sources of information with the second major component of our research, reported in the main in Monograph II (but with some special sections on mountain manufacturers) brings us to two main propositions concerning entrepreneurship as <sup>a</sup> development phenomenon. These are propositions that can be generalized beyond the particular East Kentucky case to other situations in which an area (or a country) has lagged in development but is emerging into modern life.

First, the diffusion of entrepreneurial development requires an effective communication nexus in which men who are well acquainted with the outer world retain also their links with the people and institutions of the developing or laggard areas.

Second, if this is to come about without external constraints on migration, there must be strong attachments to the area among men capable of succeeding elsewhere. Both of these ingredients have been evident among the most effective and active mountain manufacturers. High planfulness, sophistication, experience of the outside world, and a readiness to accept outsiders and gain by what they can offer, are combined in these men with strong community loyalties. In identification with the area as "my home and my kind of people" they are hardly distinguishable from the bulk of the less successful and sophisticated, but they are not so dependent on this identification. They are better educated, more open to new ideas, more ready for change. Their loyalties have a more positive, a less defensive and self-protective quality; for they are important and active men in an area where they have diffuse and profound personal ties. Entrepreneurs of this type are clearly "interstitial persons" in the sense in which that phrase is used in the second of our research endeavors, and among them are men performing very effective "cultural bridge" roles not only in the diffusion of entrepreneurial development but in the diffusion of participation in the national life much more generally among the mountain populations.

### III. THE STUDY OF MOUNTAIN ELITES

The very starkness of the economic situation in East Kentucky, which makes it an extreme case even within the Appalachian context, provides a setting that is all the more illuminating for the study of diffusion of information and attitudes and the actualities and potentials for mobilization of elites and general populace in a process of modernization. Problems and needs that are common to other depressed areas are here laid out with none of the ambiguity that tends to block consideration of social communication as a critical element in all development and modernization. Furthermore, the East Kentucky situation has been aggravated in the past by the fact that an exceedingly chopped-up terrain has impeded development of the full mesh of "nerve connections" that could serve to facilitate processes of modernization. At the same time, the concentrations of populations in the coal areas and inherited wealth in timber and coal lands have supported a traditional elite that is not found in poverty-stricken farming areas of the central mountain counties--or in poor agricultural areas generally. And different yet again, with quite another social structure and leadership, are the more accessible north and southwestern counties in which economic prospects are better and contacts with urban centers are more frequent. East Kentucky as a physical-cultural area is both one and many,

The ecological segmentalization of the Kentucky mountains has been accompanied by cultural localist attitudes and a segmentalization of institutions within the area. The valley settlements, still frequently separated

from each other by long, winding and ill-paved (or unpaved) roads, tend to harbour churches, school systems, civic and even political groups that confine their interests to those natural perimeters. There are parts of East Kentucky where a man can set up his own church in competition with his neighbor's without benefit of any wider affiliation. The very closeness and inward character of life back in the mountains has evoked bitter personalized conflicts on family, religious, and local political lines. Yet at the same time there is a wider unity of defensiveness against "the outside," and strong local commitments and loyalties are deeply entrenched among the mountain people. The need for men who can help bridge communication gaps both within the mountain area and between the mountains and the nation at large is indisputable, whether concern is directed primarily to the futures of mountain communities or of the youth who grow up in them. How far the mountain society throws up or attracts such men, and how far it mobilizes their potentials is quite another matter. This is the central empirical question, or set of questions, to which Monograph II is directed.

Social Communication, the Interstitial Person, and the Cultural Bridge Function

In a previous study, Plunkett made use of the notion of the cultural bridge function of intermediaries who serve by their activities and attitudes to link together or to integrate the local community with the larger society. The central construct around which that analysis was based is that of the "interstitial person," who is located, by the nature of his training, work, and/or interests, between two cultural systems, participating in some degree

in both. In the situation with which Monograph II is primarily concerned, one of these is the local particularistic social system of the mountain locality in which he is residing, the other is the more universalistic culture of the larger society.

Clearly the interstitial person may function as a cultural intermediary not only in the adult world, but also or alternatively as he brings local children and youth into contact with the national culture and economy into which, migrant or not, most of them will have to be absorbed if they are to become self-supporting and successful adults. Indeed, it could well be argued that in any but a short view the most important effect of cultural mediation from adult to adult will be the filtering down of such communications to reinforce processes of development that extend wider perceptions and opportunities to the children and youth now in mountain schools. It was partly this consideration and partly their unique position up the hollows that led Plunkett to apply the interstitial person construct to an analysis of elementary school teachers, using an ecological framework that located mountain teachers by degree of isolation and compared them also with a control group in Lexington. But while elementary teachers may have a wider social contact than most other inhabitants of the more isolated mountain areas, where local settlement is a little more concentrated other groups stand in equally key interstitial positions. Indeed, they may be more effective than the teachers. For the basic requirements for performance of a cultural bridge function include not only empathic identification in at least some degree with both inside and outside worlds, but also local

acceptance and legitimation as an active and influential participation in the local society.

These comments bring us back to the question, just what is the "local society?" We are not, in fact, dealing with a monolithically homogeneous mountain culture. To oversimplify, we may treat it for the moment as an internally dual culture, which means that we have not only one communication gap between inside and outside but two of these, plus one that is internal. Persons who participate in both communication systems within the local society may also be viewed as "interstitial persons" in that they are intermediaries between sub-cultures. This is extremely important though for the purpose of this study we were interested in the internally interstitial person only as he may block or reinforce transmission of messages from a wider society--in brief, only as he may be interstitial and mediate not only between local sub-cultures but also between the mountains and the outside. In effect this means cutting across the cultural gaps within the mountain society by the indirect route of enlarging awareness of the outside world in each sector of the local population. Clearly it is only as messages reach the bulk of the population that cultural bridges will be genuinely two-way, and wide enough to support modernization of mountain life, not just limited passage of a few.

Because in this research we were concerned primarily with a level of communication that opens up the cultural dykes of the local society, we have concentrated attention upon local social, economic and cultural elites and semi-elites as the carriers of interstitial role potentials. This is not to



deny the importance of communications within another stratum, as young men who have been in the army bring their impressions back or as migrants return. Indeed, a special study of this communication network, which stands quite apart from the information fields in which local elites are direct and active participants, would be very much in order. That it is important in the Kentucky mountains is indisputable. However, studies of migrants from Appalachia and from East Kentucky in particular have demonstrated their tendency to remain in cultural islands in the cities to which they go, and those who return are typically those who have the least "psychic mobility." What they have brought back in the past has presumably been correspondingly limited. But it may not remain that way. Change is certainly in the air, and if the voice of "the poor" of East Kentucky has been little heard, it may not remain so. Attitudes of our "elites" and semi-elites toward participation of the poor in local affairs seem of even greater importance today than when the present research was first designed, and so do communication gaps across socio-economic classes in the coal areas.

In any case, the initial decision to study the local elites was both a pragmatic one (it could be done at much less expense) and a carefully reasoned stand. The local elites are more diverse in both experience and origin and they clearly have greater potentials for tuning in on those aspects of the national society that offer greatest promise for successful adjustment. How they monitor the messages from outside is one of the important questions with which the study is concerned. While a study confined to the elites cannot provide direct evidence concerning what impact

they may have as transmitters of ideas to other members of the population, we can infer some of the potentials and limitations inherent in the kinds of messages the elites give evidence of receiving and accepting and the channels over which they in turn send those messages, to whom. Meanwhile, forces for economic and social change in the mountains must in any event come to terms with or coopt members of the elites--old or new.

### The Elite Samples

Groups in which potentials for performance of interstitial roles might be found were identified on an a priori basis by their occupational affiliations. In selecting occupations the first requirement was that members of the occupation should be well spread through the mountains. Beyond this, the main criteria were that the occupations included should encompass (a) groups that are commonly well represented in local civic and/or political affairs, (b) groups likely to be involved with youth and schools in sufficient degree to suggest that they might be especially important as transmitters of attitudes and knowledge to young people, (c) groups whose members were more likely than the average to have knowledge of and contacts with people and institutions outside the mountains. The occupations selected were bankers, lawyers, public officials (including local magistrates) clergymen, physicians, and secondary school teachers. These were supplemented by materials from the study of mountain manufacturers and by questionnaires from participants in management seminars conducted at various mountain locations under the auspices of the Agricultural Extension Department and the College of Commerce of the University

of Kentucky. The questionnaires used with mountain manufacturers were much shorter than the others because the main thrust of the study of entrepreneurs was in another direction. Those given the secondary teachers were necessarily different in some respects, primarily because of their distinctive position vis-a-vis youth. All others were given the same questionnaire, which carried the title "Social and Economic Leadership Study," though it was not assumed that membership in these occupational groups was at all equivalent to exercise of community leadership.

Samples stratified by occupation (with a much lower sampling ratio for teachers) were drawn from lists of the respective universes that had been compiled from professional and denominational directories, state government rosters, and, in the case of the management course trainees, an unpublished list of course participants. Teachers and clergy were surveyed by mail questionnaire; all others by interviewers. Response rates ran at about two thirds of the names drawn in making up the sample lists--somewhat higher for the teachers and clergy (despite use of mail questionnaires), and lower for the public officials. For the total interview sample list of 533 men (excluding manufacturers), those who had left or died numbered at least 43, with a possible maximum of 113, or between eight and 21 per cent but closer to the former. The low response rate for public officials entails a particular serious bias if coverage of magistrates is considered important; interviewers encountered serious difficulties in locating magistrates up the valleys and hollows. Even more unfortunate was the omission of politicians in Pike county, which was a political hot spot at the time; unfortunately we discovered this omission on the part of

an otherwise successful interviewer too late to do anything about it. (The problem we encountered in the timidity of mountain interviewers, especially when sent into "strange" parts of the mountains, was in itself very enlightening.) The numbers of returns analyzed in full were, in round numbers: 700 teachers, 170 clergy; 150 management course participants, and 80 to 100 of each of the other occupational categories (bankers, lawyers, physicians, and public officials). Despite special efforts to obtain representation in the poorest and most isolated farming counties, virtually all of the respondents from such areas were either teachers or public officials; even clergy were notably absent from those sections.

#### Content of the Questionnaires

The main objective of the questionnaires was to explore dimensions of the interstitial person by discovering the potential of the respondents as local development resources. These potentials were assessed in terms of background experience, social exposure and communication behavior vis-a-vis the "outside," local contacts with youth and development-related social participation behavior, and attitudes towards the wider national society and current development issues within the mountains. We thus included four sets of items in the questionnaires, as follows:

1. Personal background data (parental occupation and education; age; own education and training; primary and secondary occupations of respondents; nativity; loyalty to or identification with the Appalachian area; location within the study area)
2. Exposure to and communication behavior relating to the broader society (where educated, work experience outside the state and in large cities, military service, travel and newspaper-reading)

3. Social contact and participation in political and social affairs of the community (political and civic responsibilities taken, contacts with youth, contacts between school and non-school personnel)
4. Communication and development-related attitudes (concerning Appalachian people and institutions, and issues and programs in regional development)

#### Personal Background Characteristics and Outside Contacts

We found it useful in a first approximation to group respondents in three clusters. The first is members of the county-seat elites of public officials, bankers and lawyers. This is the local establishment, which is quite diverse in education and composed to a considerable degree of persons lacking advanced formal qualifications, but which is charged with most of the overt administrative functions of the local community. These were by all odds the oldest men; indeed, they showed clear signs of being a gerontocracy. They were by all odds the most predominantly native as well, regardless of age.

Second is a group of men who are certified to exercise a profession, but whose occupations do not give automatic or near-automatic access to positions of political influence or authority in the community. The members of this group are perhaps best conceived of as being at two levels--the free professions of clergy and physicians, and the teachers. Excepting the physicians and a secondary cluster of older female teachers (the age distributions for female teachers were bi-modal), these were younger men, though few except teachers were under thirty years of age. Among the

clergy there is something like a continuum of degree of "nativeness" which is of considerable importance in considering the chains of communication that may be needed to form adequate bridges between mountain people and the national society. Whereas virtually all of the "administrative elites" (bankers, lawyers, and politicians) were native to the mountains, the vast majority of the clergy were not. The Baptist clergy tended to come from rural folk backgrounds, however, whereas the non-Baptist clergy were much more cosmopolitan. The third broad group in our sample is the businessmen; management course participants and entrepreneurs (though it should be noted that many of the men sampled from the list of politicians were also businessmen). Men of this third group are quite diverse in age, schooling, and degrees of community involvement, but are generally accepted from the start as part of the mountain society that is "Us," not "Them."

There were clearly reinforcing effects in virtually all our measures of exposure to life outside the mountains; those with more education not only had more out-of-state schooling but also more experience of work elsewhere and of city living. These effects served to open an impressive experience gap between the administrative elites on the one hand, the clergy (except the older Baptist clergy) and the physicians on the other. Both teachers and business men were close to the level of the administrative group on these measures, though the G.I. bill had given post-war male teachers a boost through their out-of-state education. In all cases, sizeable minorities of each age and occupation group reported one or more

types of exposure to outside life, however. Even if migration claims large proportions of the more able, the area still contains substantial numbers of persons of apparent leadership potential who have spent time away from their homes, or who have left homes elsewhere to bring their experience to the mountains.

Two items that serve as indicators of continuing current contact s with the nation's urban society were proportions reading an urban daily newspaper and the extent of recent travel to other parts of the nation. The first of these items discriminated primarily with respect to clergy, male teachers, and public officials, a fourth of whom did not read an urban daily paper; virtually all of the bankers and lawyers and most men in the other categories were regular readers of one of the main urban newspapers. This we might expect. More surprising was the large proportions of men in our samples who had visited five or more major cities within the prior year. Majorities of the professional elites (except teachers) and of the business management course participants had done so. Even among the bankers and public officials, with the lowest proportions, 29 per cent reported visits to five or more cities during the year. This is a far higher incidence of urban contact than might have been anticipated. Even granted that for many the experience may have been superficial, the figures are impressive. But so is the contrast between the professional elites and businessmen on the one hand, the teachers on the other. Mountain teachers are on all counts very local people, even when they are teaching in the secondary schools.

## Involvement with Youth

How far do men (or women), with what experiential backgrounds and experiences, engage in activities that involve them with youth. In order to answer this question it was necessary to lay out a battery of questions, to examine association matrices, and to construct a summary index (that cannot possibly be explained in brief summary form). Some of the principal findings were as follows:

### 1. Contacts with schools and school personnel:

- a. A clear majority (around three fifths) of the administrative elites as against about two fifths of the professional elites reported relatives or very close friends employed in the school system.
- b. Thirty per cent of both administrative and professional elites reported consultations with teachers concerning programs and problems of children and youth (other than their own) over and above contacts stemming from their "regular work." For the business management course men the figure was two fifths. However, the professional elites were more often professionally involved in activities that brought them into contact with the schools on such matters. The net effect is that whereas two fifths of the administrative elites reported no contacts with school personnel on matters of youth problems or programs, only a fourth of the professional elites (and a third of the management course participants) reported such contacts as rare or lacking altogether.
- c. Regardless of sex, the people outside of the schools with whom teachers had the most frequent contacts were a group not included in our study--social workers (contacted by 64 per cent of the male and 56 per cent of the female teachers). In all other groups the female teachers reported very substantially fewer contacts than the male, though the biggest difference was in frequency of contacts with public officials.



- d. The interconnections between school and political personnel is clearly indicated by the fact that slightly over half of the male teachers reported consultations with public officials concerning youth programs and/or problems. (Only 13 per cent of the female teachers reported any such contacts.)

## 2. Non-school youth involvement and its incidence

Schools are by no means the only avenue of contact with youth.

Another set of questions concerned frequency of direct contacts with youth as individuals or in group activities, and also youth-related contacts with parents, both in the course of regular work and in voluntary activities.

The main results were:

- a. Close to half of each of the occupational groups except the non-Baptist clergy and the business men reported active contacts with individual youth but not with youth groups. The non-Baptist clergy topped the list (at 70 per cent) for proportions involved with youth groups. They were followed by the Baptist clergy (56 per cent). All others fell at 30 per cent or less involved in youth groups, but it is equally notable that the lowest figure (physicians) was by no means negligible 22 per cent.
- b. A fourth to a third of each of the occupational groups reported youth-related contacts with parents in the course of volunteer activities outside the normal course of regular work. Those reporting such contacts "in the course of regular work" ran over 80 per cent in all the professional groups, and exceeded half among public officials and lawyers. Bankers and business management course participants claimed such contacts in 39 and 32 per cent of cases respectively.

The strongly personalized and diffuse character of mountain society is reflected in these findings and their implicit interpretations of what constitutes part of the "course of regular work,"--the more universalized professional roles of clergy and physicians quite aside.

### 3. The Youth-Involvement Index and its Incidence

Responses from the school-linked and the non-school youth-linked activities questions were combined in a rough index that ranked respondents as "high," "medium" or "low" in their degree of youth involvement, applied to all except the teachers. The most interesting question at this point was how far men with relatively high degrees of exposure to and familiarity with life beyond the mountains and with relatively high levels of schooling were involved with youth, or how far such involvement characterized men whose experience and horizons were presumably much more local. The results were:

- a. As we should expect, professionals were a little more likely to be high on youth involvement, and (by virtue of their occupational roles) much more likely to be at least medium.
- b. Within each occupation those under 50 years of age scored higher than those over fifty.
- c. Of special interest, the most youth-oriented of the professionals were the most likely to have enjoyed out-of-state educational experiences and were generally the most cosmopolitan. On the other hand, the most youth-involved of the administrative elite were the least likely to have attended college outside of Kentucky, (or, for that matter, anywhere).
- d. Men with little or no youth involvement were most frequent among the administrative gerontocracy and had the least urban experience.

What this all adds up to is a very mixed sort of selectivity with respect to education and wider exposure and experience. The educationally more humble of the younger administrative elites carry on with localist, familist traditions of the face-to-face society, in parallel with the

relatively folksy activities of the Baptist clergy and the equally important, more sophisticated but less intimate professional involvement of the non-Baptist (whether in "regular" or in "volunteer" activities).

### Participation in Adult Civic and Political Activities

How far the various elites are mobilized, or mobilize themselves, for active participation in public affairs is obviously an important question in any setting. It takes on special interest on the current East Kentucky scene and in the context of recent efforts of state and federal governments to foster Appalachian development and adaptations to change. For both by intent and unwittingly these efforts have tended to bring into active public life men who had previously limited their concerns to their own business or professional affairs. Their social or civic talents lay dormant within the social context of previous mountain socio-economic and political structures. The novelty of these programs, together with their lack of acceptance by many of the power-holding elites, made necessary the wider canvassing of their constituencies, and much of the recent history of the newer development programs has been characterized by attempts to organize "town meetings" in all parts of the region--part of an effort to mobilize the population at large in the area development and economic opportunity programs.

It is useful to distinguish two types of activity: the formal political activity of the local governmental authority, and the voluntary association

of community-minded private individuals. We may refer to these activities as political and civic participation even though political activity in a broad sense is not excluded from the civic category. A pragmatic distinction between these two types of activity as we defined them is that the political activities involve direct affiliation with the traditional agencies of government and/or political party organizations, whereas the civic activities involve affiliation with organizations and/or ad hoc activities that are independent of the conventional political agencies and processes.

In the political science literature there is considerable evidence that political and civic or social participation are closely associated. However, we may doubt how far that hypothesis will apply in the Appalachian case, with the recent experience of the state and federal area development and economic opportunity programs and their attempts to introduce a number of social innovations into the area. Local participation in innovative activities may not correlate, at the individual level, with formal political activities. In fact we can distinguish four categories of individuals in a simple two-way dichotomy: those high in both political and civic activity, those high in political but low in civic, those high in civic but low in political and those who were not active in either civic or political affairs. In view of the strong hand of the local politician and his backers in the mountain communities until very recently, at least, one of the most important questions for our purposes lies in establishing whether those who have formal authority (the political activists) are also active in a broader social or civic sense, and how far they bring wider experiences into their

performance of either political or civic roles. If the political and civic activists are not the same people, it is clear that the modernizing potential of the latter will depend to a considerable degree upon the existence of shared goals and of real prospects for cooperation that may link the two groups. Again we summarized our data in crude indexes of political and civic participation. Among our findings are the following:

- (a) The proportions of the various occupational groups (other than teachers) who had held political office in the past or hold such office in the present was 60 per cent for lawyers, 38 per cent for bankers, and 23 per cent for business management course participants. On the other hand, it was very low among the professional elites, ranging from 15 per cent among physicians down to only 3 per cent for the essentially "foreign" non-Baptist clergy.
- (b) Political activism is positively correlated with age, even within the professional elites.
- (c) Overall, active participation politically is associated negatively with education, as we should expect from the characteristics of the present public officials and of businessmen in general (from whose ranks they tend to draw disproportionately), despite the heavy political involvements of members of the legal profession.
- (d) The civically active were preponderantly from the professional elites, with the non-Baptist clergy taking the lead. They were accordingly more often non-native to the area and were rarely over 50 years of age.
- (e) The numbers of men who were active in both political and civic affairs were extremely few--an eighth of the members of the administrative elites and under five per cent of the clergy and physicians taken together (regardless of age).
- (f) Regardless of age, 70 per cent of the professional elite and roughly two fifths of the bankers and lawyers rated "inactive" by our measures.

There is no gainsaying the hiatus in communication and identification

that is reflected in these participation patterns. That hiatus is the more evident when we look at relationships among occupations, experience of life outside the mountains, and patterns of political as against civic participation. Thus:

- (g) Experience of education out of the state was highest for the generally inactive men within the administrative elite, but it was lowest for the inactive members of the management courses.
- (h) The few members of the professional elites who were politically active had rarely attended schools outside of Kentucky or worked anywhere in a city of 15,000 or more.
- (i) Regardless of occupation, the small combined political-civic active group were high in education and national exposure indicators. These are clearly key men.

Overall, the patterns of social participation and youth involvement for the various occupational categories among our elites are summarized in Tables 3-18, 3-19 and 3-20, taken from the text of Monograph II. On the whole, these tables speak for themselves, but there is one consideration that calls for special comment.

Given the distinctive patterns evidenced in these tables, the position of public officials and of local businessmen become the more critical for the local communication nexus. A large proportion of those who were picked up in our samples by virtue of their political offices in fact described themselves as first businessmen, only secondarily or temporarily public officers. Also, the largest contingent with really low schooling was among the public officials, though not necessarily the businessman-public official. Evidently this is a very heterogeneous group of men, occupying

diverse places in the transmission of information and ideas and the exercise of power, both vertically through the social structure and horizontally among elites that may tend otherwise to go their separate ways. What they have in common is that in one way or another they exercise a critical influence on the operation of local communication channels, whether for the mobilization of disparate elite groups and general populace in the planning and carrying out of development efforts or, if they are so minded, in blocking such endeavors and choking the communication channels. This facilitating-blocking communication operation might almost be taken as a definition of the roles of local mountain politicians.

Mountain Attitude and Opinion Profiles; the Methodology

Be it the public officials, the other administrative elites, the professional elites (including teachers) or the local businessmen, if we are to have some clue as to what is communicated, from whom to whom by those who are more and less involved in civic, political and youth affairs, we must look into the attitudes that these elites express on matters relevant to mountain people, problems and development policies. To this end we developed an opinionnaire which called upon the respondent to check after each statement whether he agreed strongly, agreed mildly, disagreed mildly, disagreed strongly, or was undecided. The responses to these items were analyzed in several ways. (1) To start with we made a series of simple cross tabulations of responses on particular items against characteristics such as occupation, age, nativity, and so on (including some interaction effects, as of nativity with occupation). These results were interpreted informally, grouping items by an a priori logic of classification. (2) Second, we undertook a components analysis, which threw up eight factors, each of which seemed to us meaningful. One of the several reasons for taking this step was that it provides a partial check on the validity of our interpretations. Do the clusters turned up by the statistical analysis "make sense" in relation to our initial thinking in formulating the opinionnaire? (They did support our initial expectations, but they also added perspectives and raised questions that had not occurred to us before.) (3) We used factor scores as dependent variables in multiple regression analyses. (4) We constructed attitude indexes based on the high-loading items of each factor.



By use of multiple regressions it is of course possible to take into account simultaneously many more variables than could be incorporated in cross-tabulations because of the linearity constraints imposed by all regression analyses. This we did, in a series of experiments in which most of the independent variables were treated in categorical form (dummy variables not only for each occupation, but also, for example, for each age class). Some equations added constructed indexes, as the youth-involvement index or an index of degrees of exposure to urban life, or of level of "modernization" in the county in which the respondent resided.

The use of factor scores as dependent variables in regression analysis may be regarded as a questionable procedure, and if we were doing this research over again we would first convert them into simplified indexes, as in (4) below. However, it seems clear that the chief effect this would have had on our results would have been to raise somewhat the explanatory levels attained and to strengthen some of the regression coefficients correspondingly. Clearly there would still have been a very large unexplained variance in all cases; there are unquestionably important divergences of attitudes within sub-groups of the mountain elites no matter how we classify them. This, indeed, is one of the most promising as well as the most confusing and frustrating of the characteristics of mountain society. Furthermore, we can find no reason for supposing that simplification of the dependent attitude variables by use of indexes instead of factor scores would have altered the patterns of regression coefficients in any substantively important ways.

(4) The fourth step, nevertheless, was to construct indexes making use only of the highest loading items on each of the factors thrown up by the components analysis. This has the great advantage, at which we just hinted, that it eliminates a considerable amount of irrelevant "noise" created by the inclusion of large numbers of attitude items with low factor loadings in the derivation of individual factor scores. It also permits meaningful comparisons between levels of accord with one versus another attitude complex. Although we came to the construction of these indexes belatedly, and hence did not use them in the multiple regressions, we did use them in a summing up of patterns of association among attitude clusters, indexes of social participation, occupations, age and nativity characteristics of our sample. The organization of items under factor headings as presented in Table 5-1 of Monograph II,<sup>1</sup> reproduced to accompany this summary, gives a more accurate picture of what the indexes are than of the factors themselves. In reading that table it should be noted that in the original coding "strongly agree" was scored 1, "strongly disagree" 5. This means that a negative sign beside a loading on an item implies that agreement with that item will contribute to a high factor score (i.e., go in the direction indicated by the factor); when the loading carries a plus sign it is those who disagree who will be in accord with the attitude cluster the factor is depicting.

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<sup>1</sup> Table 5-1 omits opinionnaire items that were not included on both teacher questionnaires and those of the other groups, though we will refer to certain of these items in ensuing discussions.

An Over-view of the Attitude Profiles  
and Their Correlates

Setting aside social participation and youth-involvement measures for the moment, we will first attempt to lay out some of the most important elements in mountain attitude profiles, considering both what attitudes and attitude clusters are particularly pervasive (or rare), and the characteristics of respondents that may distinguish them along one or another attitude dimension. In presenting this material we draw from the various analyses as each may help elucidate a point, whether to sharpen it, to carry it to somewhat greater depth, or to warn against its misapplication. Only in part, therefore, will this discussion match the groupings by factors in the accompanying tables, and it will include some items not on any of those tables.

1. Traditional individualism

Among the major themes of traditional mountain life and culture have been an ethic of rugged, self-sufficient individualism, grass-roots democracy within segmentalized local communities, pervasive familism, and a profoundly personalized approach of man to man -- all of them features of small-community 19th century life that run counter to the complex organizations, interdependencies and depersonalization of modern urban living. These are values on which America was built, and it is not our intent to challenge their worth, but as an integrated value complex they expressed a different era. Insofar as they survive in force in the mountains today, they take on their contemporary meaning from that setting and contribute to the strong identification of mountain people with their homelands and the passionate uncritical loyalty of many to mountain institutions. No man who fails to appreciate

the profound importance of this heritage can possibly realize the full potentials or complexities and difficulties inherent in the cultural bridge role. Interpreted at its best and most empathetically by men who know -- notably Caudill, Weller, and Brown -- the Appalachian understanding of man as an individual and as a member of a closely-knit primary group or local extended-family community must be recognized as inhibiting what the political scientists have termed "psychic mobility."

How far the ideologies of either rugged individualism or grass roots democracy do or do not persist among the elites we have studied is a question on which we can present some fairly direct evidence. Though we have no such evidence with respect to the strength of familism and associated traits, their persistence has been amply documented by others and is immediately experienced by any perceptive visitor who stays long enough to tune in on local life. Many features of our response patterns gain meaning when interpreted in that perspective.

Rugged Individualism. The most striking characteristic of the mountain manufacturers was their strong manifestation of an individualistic ethic in almost 19th century purity. But they were by no means distinctive in this respect. The pervasiveness of this view is exemplified by the virtually universal agreement among all but the non-Baptist clergy with the proposition "If a young man really has ambition he can make a success of his life no matter how poor or ignorant his family may have been." Moreover, most "agreed strongly." But if this attitude taken as a precept for living has been the bed-rock of a sound economy, economic growth, and intergeneration

economic mobility, it is also an expression of implied intolerance vis-a-vis those who are less successful. The intolerance that is the reverse side of the ambition ethic is indicated in the strong support for the proposition "Public assistance has made people into lazy loafers and they won't work even when a job is offered them." Here again agreement was virtually overwhelming among the businessmen, the bankers and the Baptist clergy, with physicians not far behind, though the businessmen were the most emphatic in their expressions of strong agreement. Among the non-Baptist clergy, lawyers, and public officials, large minorities disagreed with this statement.

In parallel with the prevalent intolerance of men on relief, we found very strong support for the quality of mountain workers. Virtually all of the manufacturers and 90 percent of most of the other respondents agreed that "Mountain men are good workers if you understand how to get along with them," though proportions who strongly agreed ranged widely: manufacturing entrepreneurs 94 per cent; public officials 81 per cent; bankers 73 percent; lawyers 67 per cent; physicians 57 per cent; Baptist clergy 49 per cent; non-Baptist clergy 35 per cent. On the other hand (and part of the same individualistic syndrome) three to four fifths of all occupational groups subscribed to the proposition that "labor strife has kept a lot of business out of East Kentucky." The fact that the components analysis did not turn up any factor that could be distinguished as indexing an ethic of "rugged individualism," is attributable primarily to the fact that only two of the above questions were included in the factor matrix. Measured more indirectly individualism ranges widely in ramifications that are picked up as elements

of attitude clusters with other central foci, most notably in Factors 2, 4, and the inverse of Factor 5 (pages 127a, 124a, and 130a).

## 2. Grass-roots democracy.

Local, free enterprise, individualist America was once also the locus of government by face-to-face interaction at the grass roots. Factor 4 provides a very tidy summing up of the grass roots theme, incorporating participation of the poor and of youth, along with a desire for a wider diffusion of information and understanding of federal activities through the community as a whole. Both cross tabulations and multiple regressions showed that teachers, clergy and public officials were the most supportive among the various occupational groups. So were the oldest men (over 60) and the least educated, regardless of what other independent variables were included in the analysis. At the other extreme, on none of the items with highest Factor 4 loadings did the bankers register any enthusiasm. It is of considerable interest to take note of the occupational range in proportions agreeing to this set of questions.

First is the statement "You will rarely get decisions that are realistically geared to the problems of the poor unless the poor have their own representatives." Among teachers, the two categories of clergy (Baptist and non-Baptist) and the public officials, proportions agreeing ranged from two thirds to three fourths; among bankers, at the other extreme, only 40 per cent agreed. This is a substantial inter-occupational contrast,

## FACTOR 4. --FAVORING GRASS-ROOTS PARTICIPATION

| Factor   | Percentage Distribution of Resources |                 |               |                    |                      |      | No<br>Response |
|--|--------------------------------------|-----------------|---------------|--------------------|----------------------|------|----------------|
|  | Agree<br>Strongly                    | Agree<br>Mildly | No<br>Opinion | Disagree<br>Mildly | Disagree<br>Strongly |      |                |
| 1 You will rarely get decisions that are realistically geared to the problems of the poor unless the poor have their own representatives   | -.682                                | 30.1            | 29.9          | 5.0                | 18.9                 | 13.1 | 3.1            |
| 2 Some of the money now spent by the federal government on new projects would be better spent in bringing greater understanding of programs and policies to the community as a whole | -.584                                | 29.1            | 31.3          | 12.0               | 14.6                 | 9.8  | 3.2            |
| 3 Youth newly out of school are not given a chance to participate actively in community affairs  | -.511                                | 21.7            | 28.1          | 6.3                | 24.7                 | 16.1 | 3.1            |





but equally significant is the very great overlap and the large minority of even bankers who gave at least verbal support to an active role for the poor. (We are making no judgments about how far this finds expression in practice.)

Responses with respect to participation of youth are on a somewhat different ground; young men will grow older, and grass-roots participation does not necessarily imply giving youth a major voice. Indeed, proportions agreeing with the position that young people should be given a chance to participate more actively in community affairs were generally somewhat lower than those on the somewhat different question relating to the poor. The drop-off in support for youth participation versus participation of the poor is particularly striking among teachers, both male and female: although they ranked first in support of an active role for the poor, they dropped to around the median among occupations in their response on participation of youth -- with about fifty percent agreeing.

Grass-roots participation in the face of confusion and multiplication of federal activities, agencies and personnel descending upon the mountains is not exactly easy to accomplish. It is extremely interesting from this point of view that the components analysis should have given responses concerning the need for better diffusion of information and understanding through the community so high a factor loading in conjunction with the responses concerning participation of the poor and of youth. Politicians were especially outstanding in their agreement concerning the need for such information. Some distance after them came teachers. Among bankers, lawyers and clergy, bare majorities would divert any of the existing federal money into more adequate communication of what it is all about. Among the professional elites the older men, among the administrative elites

the least educated, were those who most often and most strongly support more efforts to diffuse information and develop wider public understanding. Natives of the area agreed more frequently than non-natives. These patterns suggest that we may be identifying where the need is most felt by respondents themselves. This item clearly touched a raw spot within the local administrative ranks, and particularly among their more humble occupants. Indeed, with the multiplication of legislation, programs and agencies, only a few among the better informed were able to keep track of the operations and their objectives -- let alone to make strategic decisions among priorities in regional development. Given the further difficulty of major gaps in basic presuppositions of men with "inside" and those with "outside" cultural roots, who must get together to implement programs, it should hardly surprise us to find that communication often breaks down, or that conflicts arise, or that locally unpopular or unappreciated programs (and goals) are simply bypassed.

Finally, before leaving the discussion of Factor 4, it is worth noting that two distinct characteristics appear to lie back of the patterning of characteristics associated with supportive attitudes -- whether in the multiple regression analyses or in cross-tabulations on the particular items. These are traditionalist local democracy old style, and a relatively timeless humanism that may edge into the beginnings of democracy 1980-style. That so little of the variance in factor scores is statistically explained is fortunately attributable, at least in part, to a rather wide diffusion of these underlying attitudes. Humanism and face-to-face democracy are not the monopoly of any particular sub-categories of the mountain elites. But here, and also with respect to diversities in responses on some of the items

clustered in Factor 2, there are also manifest disjunctions between old-fashioned grass-roots democracy and new-fashioned "involvement of the poor" and of the young. This is a setting for conflict, and conflict there has been. It is also, however, a situation in which shifts of power and influence may easily shift policies and behavior, whether with or against OEO and related efforts to involve new groups in community action.

### 3. Defense of ordinary mountain people

In discussing both the mountain ethic of individualism and the cluster of attitudes around grass-roots democratic participation we were dealing in considerable measure with ideas as to how people ought to behave and how a society ought to function. Another group of items on the opinionnaire pick up attitudes relating more directly to what mountain people in particular are like.

Factor 2, which we gave the short label "Defense of Area People", might better have been labeled "Support of the Ordinary Man." The regression analysis was especially helpful in this case as an aid in sorting out just what was involved. Even though occupational affiliations, age, experience of working in urban places, and location within the mountains together explained 12 percent of the variance in scores on this factor, this was a higher  $R^2$  than on any of the other sets of regressions except those for Factor 7. Teachers came through with by all odds the strongest positive values; politicians, bankers, and business management course participants were all decidedly negative, as were older men. Experience of work in cities contributed significantly negative values, and there was a significant locational contrast between residents of the poorest farming areas, who



## FACTOR 2. --DEFENSE OF AREA PEOPLE

|  | Factor Loading | Percentage Distribution of Responses |              |            |                 |                   | No Response |
|--|----------------|--------------------------------------|--------------|------------|-----------------|-------------------|-------------|
|  |                | Agree Strongly                       | Agree Mildly | No Opinion | Disagree Mildly | Disagree Strongly |             |
| 1 Having representatives selected by the poor on planning committees retards long-term development   | .550           | 16.9                                 | 23.1         | 15.7       | 23.7            | 16.3              | 4.3         |
| 2 Labor strife has kept a lot of business out of East Kentucky   | .498           | 41.0                                 | 25.6         | 6.3        | 13.2            | 11.7              | 2.1         |
| 3 Too many young people have been emigrating from East Kentucky without adequate reason  | .415           | 11.2                                 | 14.9         | 4.4        | 25.1            | 42.3              | 2.1         |
| 4 Rising National prosperity would do more for the mountains right now than all the special programs for their economic development            | .404           | 14.9                                 | 23.3         | 7.1        | 25.0            | 24.5              | 5.3         |
| 5 One of the most serious problems in the mountains is that too many people are suspicious   | .387           | 11.2                                 | 27.4         | 6.5        | 25.6            | 26.3              | 3.1         |
| 6 An educated preacher can contribute more than anyone else to help mountain people bridge the gap between mountain life and the outside world | (.326)         | 15.9                                 | 30.7         | 7.5        | 23.3            | 19.4              | 3.2         |

were very strongly supportive of the ordinary man, and respondents in the coal counties at each of the three river headwaters, who were much more critical of him. Taken together, the items that cluster in this factor present a strongly personalistic, defensively empathic mood, and the incidence of strongly negative scores reveals very clearly where the internal gaps in empathy and in communication across socio-economic status are most severe.

4. Loyalty to local institutions versus their evaluation by external criteria

The pervasiveness of identification with the mountains, even among those who were non-local in origin and did not expect to remain there throughout their lives, was very clearly evidenced in responses to a multiple choice question concerning feelings about living in the area (not in agree-disagree form). From our own limited personal experience, we must agree that there "is something about them" that won't let you go, even when you are frankly a very temporary sojourner in that land. Among our respondents, public officials and bankers, who were predominantly both native to the area and older men, were of course the most fully committed to their local habitats. But lawyers, physicians, and management course participants fell in very close behind. The relatively mobile clergy stood out in contrast in that only half of them (Baptist or non-Baptist) considered themselves as permanently settled in their localities. There was a substantial group among them who regarded their present residence in the mountains as a rewarding experience providing it did not last too long. These latter men are generally more, not less, involved in community human-development programs than are those with greater permanent commitment to the locality.

Of particular interest are reactions to the statement "Our local schools are doing a good job." Responses were overwhelmingly supportive of the local schools, though least so (at 65 percent) among the physicians and the non-Baptist clergy. The Baptist clergy joined the entrepreneurs in an 85 percent level of agreement. Interestingly enough, if we exclude the manufacturers (as was done necessarily in the components analysis), we find that this statement received strongest support in exactly those mountain locations in which the objective evidence of inadequacies in the schools is most striking. Where schools were comparatively good on a mountain scale, local residents were much more critical of them. The standard or criterion for judgment at the headwaters looked inward, but in the more accessible locations it was an external one. Similarly, the least educated men along with the oldest, those native to the area, and those with least experience elsewhere, were the most emphatic in their supportive responses.

Identification with the local area to a degree that entails some empathy with local people and culture is probably essential to effective performance of cultural bridge roles, but in fact only a tiny minority of those studied went so far as to check a response stating "I definitely do not like living here." Given the overwhelming majority who identified strongly with the mountains and their particular corners within the area, there can be no question of the existence of a very solid empathic foundation at the local end so far as potential cultural bridge roles are concerned. The other end of the bridge is less secure. This is evidenced in many ways, including defensive manifestations of local loyalties and the resentments of outsiders among large fractions of the local elites. These attitudes are clearly reflected in responses on our opinionnaire.

Factor 3 picks up this item the other way around, in a clustering of responses that are critical rather than defensive of local schools, their teachers, and their capacities to prepare mountain children to take a place in the outer world of national, not merely local life. The most interesting findings in multiple regressions with respect to this factor were first, the very extreme contrast between Baptist clergy, with their unqualified defense of localists' positions vis-a-vis the schools, and the non-Baptist clergy with their comparatively critical and cosmopolitan views. Second, there was a very notable positive association between an index of the education of parents of the respondent and his position with respect to the mountain schools, even holding occupation, education and nativity constant. Although there were clear distinctions by nativity in a zero-order association with item 15 alone ("Our local schools are doing a good job."), nativity was insignificant in multiple regressions in which Factor 3 scores were the dependent variable.

Factor 5 also pulls out what is distinctively a minority view. The emphasis in this case is on the disadvantaged backgrounds of mountain children. For each occupational group the proportion answering the main Factor 5 items in the direction pointed by the factor was well under 20 percent; the only exception (as is so often the case) was the non-Baptist clergy. Here we see clearly both a distinctive approach to human beings and the effect of wider perspectives and experience on the basis of which evaluations are being made. Or so it would seem. But there is another twist in the selectivity for positive scores on this factor. The education group most inclined to see mountain children as burdened by their backgrounds were those who came closest to suffering from this problem themselves, the least educated.



## FACTOR 3. --CRITICAL VIEW OF LOCAL SCHOOLS

|   | Factor Loading    | Percentage Distribution of Responses |              |            |                 |                   |             |
|---|-------------------|--------------------------------------|--------------|------------|-----------------|-------------------|-------------|
|   |                   | Agree Strongly                       | Agree Mildly | No Opinion | Disagree Mildly | Disagree Strongly | No Response |
| 1 The education given young people in mountain schools does not prepare them for life elsewhere                 | -.665             | 15.9                                 | 24.5         | 2.3        | 27.3            | 27.               | 2.5         |
| 2 Our local schools are doing a good job  | .657 <sup>a</sup> | 31.3                                 | 42.4         | 1.1        | 13.3            | 10.2              | 1.6         |
| 3 The elementary school - teacher's training equips him or her to take a part in community development planning | .543              | 29.5                                 | 37.1         | 8.5        | 14.8            | 7.5               | 2.7         |

## FACTOR 5. --BURDEN OF DISADVANTAGED BACKGROUNDS OF MOUNTAIN CHILDREN

|   | Factor Loading | Percentage Distribution of Responses |              |            |                 |                   |             |
|---|----------------|--------------------------------------|--------------|------------|-----------------|-------------------|-------------|
|   |                | Agree Strongly                       | Agree Mildly | No Opinion | Disagree Mildly | Disagree Strongly | No Response |
| 1 There would be less 'welfare-ism' in the mountains if the proportion of time the schools devoted to vocational courses were greater | .574           | 50.6                                 | 31.2         | 5.2        | 7.5             | 3.2               | 2.2         |
| 2 Technological progress is going to hurt more than help the futures of children now in mountain schools                              | -.514          | 8.8                                  | 11.6         | 10.4       | 25.1            | 40.0              | 4.1         |
| 3 If a young man really has ambition he can make a success of his life no matter how poor or ignorant his family may have been        | .437           | 64.4                                 | 18.3         | 0.1        | 4.3             | 3.6               | 9.2         |



Those least inclined to make this interpretation were the high school graduates. At the same time, there was a strong positive correlation between an indicator of degree of modernization of the county in which respondents resided and inclinations to see mountain children as disadvantaged. Those in the most favorable locations had the highest positive scores on this factor in part because (as in assessments of local schools) they were in a better position to judge the severity of those handicaps, but probably also in this instance because in answering the question some of them looked deeper into the mountains.

##### 5. Views of "Outsiders" in the mountains

Along with defense of local institutions have gone pervasive resentments of peripatetic outsiders who came to look, to advise, to "help," but rarely to learn or to share.

Among the most frequently articulated have been resentments of the "prying" journalists who have publicized mountain affairs. In part this has clearly been a resentment of the invasion of privacy, of the intrusion of curiosity seekers without empathy or understanding, to exploit distress for public display. However, the resentment of journalists is not confined to the publicity snooper (or even to the non-local man); it tends to be directed at anyone who challenges mountain practices and institutions, whether directly or indirectly, <sup>and</sup> no matter how constructively. What we observe is clearly a compound of personalized feelings of injury (whether on one's own behalf or that of others) and the quite different, misguided notion that somehow the mountains would be able to attract substantially more industry if they were not given such a black image. The latter clearly accounts for the

fact that the management course participants were particularly emphatic in their agreement with the proposition that "The journalists who have been publicizing mountain problems in the national press do a lot of harm." On the other hand, sheer resentment of intrusion into "private" affairs, and perhaps a sense of indignities perpetrated, seem the more plausible explanation of the fact that over half of the native professionals were strongly critical of the journalists, as against only two fifths of the native administrative elites and roughly a third of the non-natives in both groups.

Feelings of resentment or ambivalence with respect to outsiders are by no means reserved to the journalists. Three fourths or more of the respondents in most occupational categories take the position that a major problem is that "The Feds don't understand." The most striking exception, interestingly enough, was the manufacturing entrepreneurs, whose geographic concentration in the relatively more accessible locations is undoubtedly relevant. Half of the respondents agreed and only 40 percent disagreed that "It would be better if the young volunteers who came in to help were all local; outsiders don't belong and mountain people often resent their interference." On this question also the mountain manufacturers, along with the non-Baptist clergy, were the least localist. Only out-of-state teachers escaped majority disacclaim.

All of these items, along with another in which the respondent is judging how other people feel, turned up in the components analysis as Factor 6, but expressed the other way around to pull out the minority who disagreed with these localist and anti-stranger points of view. Multiple regressions for this factor came through with the expected positive significant relationships to schooling in other states and negative coefficients in

## FACTOR 6. --LOCAL RECEPTIVITY TO OUTSIDERS

|   | Factor Loading | Percentage Distribution of Responses |              |            |                 |                   | No Response |
|---|----------------|--------------------------------------|--------------|------------|-----------------|-------------------|-------------|
|   |                | Agree Strongly                       | Agree Mildly | No Opinion | Disagree Mildly | Disagree Strongly |             |
| 1 Mountain people are proud and they don't like outsiders coming in and trying to change the way they do things   | .714           | 29.7                                 | 34.7         | 1.5        | 20.4            | 10.2              | 3.4         |
| 2 It would be better if the young volunteers who come in to help were all local; outsiders don't belong and mountain people often resent their interference | .571           | 24.7                                 | 26.5         | 4.4        | 25.3            | 15.7              | 3.4         |
| 3 An out-of-state teacher is more of a problem than an asset to most local elementary schools   | .517           | 8.2                                  | 11.5         | 8.7        | 29.0            | 40.3              | 2.3         |
| 4 One of the biggest problems in trying to plan and coordinate local development efforts is that the Feds don't understand the situation here               | .465           | 35.7                                 | 34.0         | 5.8        | 15.6            | 5.9               | 2.9         |
| 5 The journalists who have been publicizing mountain problems in the national press do a lot of harm  | .400           | 39.7                                 | 24.9         | 4.7        | 17.1            | 11.4              | 2.3         |



the oldest age category (men over 60). More interesting, the coefficients of regression were strongly negative for non-Baptist clergy, who stood out sharply from all other occupation groups in this respect. At first this finding surprised us, but an examination of the responses of the non-Baptist clergy on each of the separate items involved showed clearly what was involved. The strongly negative responses of the non-Baptist clergy reflected their overwhelming agreement with the proposition that "Mountain people are proud and don't like outsiders coming in and trying to change the way they do things" and their predominant agreement that "The Feds don't understand," whereas the Baptist clergy were more inclined to criticize Vista and the journalists. Thus despite the statistical clustering of items that seemed to be anti-outsider, or rather, as Factor 6 appeared, the inverse of this, the two sets of clergy were in fact very different in their perceptions. The Baptists looked from the inside, as it were, to express their own personal feelings, whereas the non-Baptists were onlookers, expressing an evaluation of interactions and communication failures between categories of insiders and outsiders apart from themselves. This feature of the roles (and self-perceptions) on the part of the non-Baptist clergy is an important facet of the complex of interrelationships both among the mountain elites and between those elites and other mountain people on the one hand, strangers to the mountains on the other.

#### 6. Perceptions of interstitial persons and the cultural bridge function

Several items on the opinionnaires were intended to identify how respondents perceived themselves and others with respect to performance of

public services, contributions to area development, and cultural bridge roles. One of the statements that was omitted from the teachers' questionnaire and hence from the components analysis read: "Business and professional people serve the common welfare best by concentrating their efforts on developing as fully as possible their own firm or practice." This does not preclude the idea of other obligations to the society, however. In fact, proportions ranging from 32 to 95 percent subscribed to the idea that "Men with my educational background should actively encourage programs that will help bring mountain people into closer contact with ideas and events outside the mountains." The agreement on this latter item may have very little meaning when it is only "mild," however, since it may be nothing but lip-service to a generally "good" proposition. It was possible to refine our analysis on this point by the combined use of several sets of data to derive an index of broad-based attitudes concerning voluntary services to the community beyond what would be inherent to an occupation. This dramatized the extremes of the non-Baptist clergy, with their emphasis on social responsibilities, and the bankers with their disinclinations toward such activities or attitudes. Public officials, lawyers, and Baptist clergy followed the non-Baptist clergy, but only after a big gap. Closest to the bankers are the businessmen.

Since we found that the clergy were among those most likely to accept the responsibility of serving as cultural mediators, it was interesting to review responses to an item bearing upon the special role of "the preacher" as a cultural intermediary. Clergymen themselves, along with entrepreneurs and bankers, rate their profession highly in this respect; lawyers and teachers were more skeptical. Regardless of occupation, the non-local administrative and professional elites were markedly more likely to see the



preacher as a key cultural intermediary than were the locals -- among the non-locals three fifths took this position as against 47 percent of the local men. It is not at all clear, however, what images of "the preacher" evoked these responses; it is entirely possible that those images and the real men behind them diverged in highly significant respects.

These and other responses bring out the fact that respondents generally envisage the cultural bridge function as one that can be served only by people who come from or who strongly identify themselves with the local society and economy, rather than by free-floating and culturally strange persons. Unless an individual can sink the mountain end of the bridge firmly in mountain rock and soil, his role as mediator will be limited. The difficulty is then to find men who can simultaneously stand anchored at the national or "outside" end. In fact, such men are rare, and what usually happens, when anything really happens, is a swinging walk across a chain bridge of several links. Development agencies and programs must inevitably encounter difficulties in this complex communication structure.

#### 7. The anti-migration syndrome

If a majority of most respondents resist the "intrusion of strangers" who cross the bridge physically, if not in spirit, from the outside in, how do they feel about crossings in the other direction? There can be no doubt that the familism and personalism of mountain life, together with its internal geographical segmentalization, have contributed not only to strong ties with the local area, but also to feelings of insecurity beyond the bounds of familiar valleys. Under these circumstances, migration can be a painful alternative even for those otherwise equipped to compete in urban labor markets.

These facts have been reflected in the preservation of localized pockets of mountain migrants in urban ghettos and in the impassioned assaults of mountain leaders of the late 1950's and early 1960's on any suggestion that out-migration must be accepted as an aspect of the adjustment of the mountain economy to a changing national scene. It is encouraging/to see that despite this history, two thirds of our respondents disagreed, 43 percent of them strongly, with the political shibboleth that "It is unfair to ask a man who has grown up in the mountains to leave his friends and kinfolk in order to get a job." Support for this proposition is undoubtedly projective of personal feelings in many cases, most strikingly so among the magistrates up the hollows. But there is another element in the picture. The lawyers and the bankers, and the older men (regardless of occupation) who shared in giving this statement substantial minority support, with approximately two fifths agreeing, are the categories of the elites among whom we found empathy for men who had not succeeded in life. In general, they are also those whose self interests would be best served by pursuing a regional aggregate income maximization goal, rather than the people-centered sorts of welfare goals that would be implied by the normative definition of development we suggested in the introductory pages of this summary. This in itself does not, of course, prove that the policies they would suggest are wrong from a more humanitarian point of view. It does suggest, on the other hand, that this pattern of responses should give pause to those government advisers who have espoused "decent jobs, at decent pay, for everyone, everywhere" as presumably attainable or even desirable societal goals. But this is a matter to which we will return in the last section of this summary report.

## FACTOR 7. --LOCALIST ANTI-MIGRATION SYNDROME

|  | Factor Loading | Percentage Distribution of Responses |              |            |                 |                   | No Response |
|--|----------------|--------------------------------------|--------------|------------|-----------------|-------------------|-------------|
|  |                | Agree Strongly                       | Agree Mildly | No Opinion | Disagree Mildly | Disagree Strongly |             |
| 1 It is unfair to ask a man who has grown up in the mountains to leave his friends and kin-folk in order to get a job                                    | -.641          | 13.2                                 | 15.1         | 2.4        | 24.1            | 43.2              | 2.1         |
| 2 The main deficiencies in mountain labor are attributable more to lack of opportunity to acquire know-how on the job than to inadequate school learning | -.511          | 33.1                                 | 31.9         | 3.1        | 15.9            | 13.0              | 3.0         |
| 3 Too many young people have been emigrating from East Kentucky without adequate reason  | (-.349)        | 11.2                                 | 14.9         | 4.4        | 25.1            | 42.3              | 2.1         |
| 4 Local vocational schools don't put enough emphasis on training for work in the mountains   | (-.324)        | 21.9                                 | 25.5         | 16.7       | 18.8            | 13.5              | 3.6         |

Coming back to the anti-migration syndrome once again, this was very clearly delineated by the clustering of items in Factor 7, which include not only the extreme statement just discussed (which had the highest factor loading), but also statements decrying lack of vocational training oriented to work in the mountains and the lack of opportunities for acquisition of skills on the job in mountain employment. We were more successful in explaining variance in scores on Factor 7 than on any other factor, although even here the maximum  $R^2$  was only .16. As previous remarks would suggest, the county power centers of bankers, lawyers and public officials came through strongly. Physicians took off in the opposite direction, however, followed after a gap by clergy and teachers. The syndrome is carried preponderantly by older and by less educated men, both age and education contributing significantly even when occupations were included in the regressions. It is of course distinctly an attitude linked with local origin. It finds its most extreme manifestations in the Sandy River counties, despite the fact that public officials were under-represented in that area and that Sandy River respondents rated relatively high on receptivity to outsiders as depicted by Factor 6. This should warn us that the web is a complex one.

#### 8. Physical investments and mountain development prospects

Questions that related to mountain economic prospects or to investment in physical infrastructure included not only items 4 under Factor 2 and items 1 and 2 of Factor 8, but also two others not included in the components analysis. One of these was "The new East Kentucky turnpike and planned 'development highways' will move people out of the mountains more than bring business in." Proportions agreeing to this

## FACTOR 8. --SKEPTICISM ABOUT VALUE OF PHYSICAL DEVELOPMENT POTENTIALS

|   | Factor Loading | Percentage Distribution of Responses |              |            |                 |                   | No Response |
|---|----------------|--------------------------------------|--------------|------------|-----------------|-------------------|-------------|
|   |                | Agree Strongly                       | Agree Mildly | No Opinion | Disagree Mildly | Disagree Strongly |             |
| 1 Development highways are essential and it's about time the back country got its share   | .617           | 69.2                                 | 22.9         | 1.8        | 2.1             | 1.0               | 3.0         |
| 2 The next million dollars for Appalachian programs would be better put into water, sewage, access roads, etc., than into efforts to develop the economic potential of the working-age population | .495           | 41.0                                 | 19.2         | 4.2        | 15.8            | 15.8              | 3.1         |
| 3 East Kentucky has been exploited by outside capitalists   | .403           | 36.5                                 | 26.2         | 9.2        | 13.2            | 12.0              | 4.0         |
| 4 Interstate pacts or national legislation with teeth in it to control strip mining and require land rehabilitation would just put more mountain men out of jobs                                  | (-.382)        | 8.3                                  | 8.1          | 8.1        | 18.5            | 54.6              | 2.4         |

statement ranged across occupations from 10 percent among the public officials to a fifth among the manufacturing entrepreneurs, the bankers and the non-Baptist clergy. The other statement read: "A well-planned program to foster tourism could put the mountain economy back on its feet." Responses on this one were extremely optimistic -- especially among the bankers and public officials, close to nine tenths of whom agreed. The clergy, of all demoninations, were the least sanguine, with two thirds agreeing. However, no statement evoked such universal agreement as item 32; "Development highways are essential and it's about time the back country got its share." Here agreement rates ranged across occupations from 92 percent at the lowest (among female teachers) to 100 percent among the bankers. Bankers and public officials were both the most optimistic with respect to businessmen's reactions to local programs (a multiple choice question not in agree-disagree form) and the most inclined to take the position that national prosperity was the key medicine for local ailments -- a view in which they were joined by the manufacturing entrepreneurs. Among other occupational groups there was less optimism in this respect, and age and education contrasts were marked. Thus, the older and least educated residents were the most inclined to take a position that national prosperity would filter into the mountains and solve their problems, without any special local efforts and particularly without doing much so far as development of people is concerned.

The issue of priorities as between investment in physical infrastructure versus in human development was specifically joined in item 2 of Factor 6. Excepting female teachers (45%), majorities in all occupational categories agreed that "The next million dollars for Appalachian programs would be better put into water, sewage, access roads, etc. than into efforts

to develop the economic potential of the working population." However, the majorities among the clergy and the male teachers were extremely small, whereas three fourths or more of the administrative elites took this position, and older men leaned strongly in this direction regardless of occupation.

Responses of the minorities who were less inclined to support infrastructure investments as of first priority, or to take positions to the effect that East Kentucky had been exploited or had not gotten its share, are picked up in Factor 8, which we have labeled "skepticism about physical development potentials." The regression analysis showed that variations in scores on this factor were related more to location than to characteristics of respondents, except that men over sixty years of age were the most emphatically negative in their scores (placing the strongest emphasis on physical resource investments and on past inequities and exploitation in these respects).

9. Education, compensatory human development programs, and Federal-local cooperation

It is one thing to come down on the side of investments in infrastructure development when forced to set priorities. It would be quite another to take an outright position against human development efforts, Federal involvement aside.

Among compensatory educational programs (items 1, 2 and 3 of Factor 1) strongest support goes to "programs like Head Start for the pre-school age child," though this is followed closely in the favor of most of the local elites by the proposition that "the inclusion of classes for unemployed fathers is a major advance over old relief programs." Teachers and bankers





FACTOR 1. --SUPPORT OF FEDERAL-LOCAL COOPERATION AND COMPENSATORY HUMAN  
DEVELOPMENT ACTIVITIES

|  | Factor<br>Loading | Percentage Distribution of Responses |                 |               |                    |                      |                |
|--|-------------------|--------------------------------------|-----------------|---------------|--------------------|----------------------|----------------|
|  |                   | Agree<br>Strongly                    | Agree<br>Mildly | No<br>Opinion | Disagree<br>Mildly | Disagree<br>Strongly | No<br>Response |
| 1 Kentucky school systems need more of programs like Head Start for the pre-school age child   | -.605             | 40.6                                 | 28.3            | 3.9           | 10.7               | 13.9                 | 2.6            |
| 2 The inclusion of classes for unemployed fathers is a major advance over old relief programs  | -.582             | 35.4                                 | 32.2            | 24.4          | 7.5                | 9.6                  | 10.9           |
| 3 The job corps camp program will do a lot for East Kentucky youth   | -.575             | 18.2                                 | 33.1            | 13.3          | 17.7               | 15.2                 | 2.52           |
| 4 Generous federal financial assistance in local development saps local initiative   | .523              | 36.1                                 | 29.7            | 2.8           | 14.3               | 13.0                 | 4.0            |
| 5 The federal government often gives so much technical assistance and advice on development projects that local people lose interest in thinking things out for themselves | .496              | 30.9                                 | 32.0            | 5.5           | 17.2               | 11.9                 | 2.59           |
| 6 Recent national education bills will bring too much federal intervention in local schools  | .491              | 20.6                                 | 24.2            | 9.5           | 23.4               | 19.6                 | 2.7            |
| 7 The kind of adult education that could accomplish most in the mountains would be long programs (a year or more) in basic reading, writing, and arithmetic                | (.355)            | 35.7                                 | 31.4            | 5.8           | 15.5               | 9.3                  | 2.3            |

(an unusual combination) are much more dubious on the latter than any other groups. A bare half or less in each occupational group were supportive of the job corps camp program, at least as a measure that could be of any value to East Kentuckians. On the other hand, over-all there was remarkably strong support among most groups for long programs in basic elementary schooling for adults, though again, male teachers were far from enthusiastic. The public officials seemed most inclined to put themselves down as in favor of everything and anything that would mean either more programs or more grass-roots participation.

Basic literacy is a generally comprehended universal goal of schooling, even if methods and costs of achieving that goal among adults are more ambiguous. But the goal of educating youth explicitly to enable them to participate in tomorrow's society outside as well as in the mountains is something else, and attitudes on this are very much enmeshed with feelings about migration of young graduates of local schools. A majority of the local elites simply are not ready to ~~see~~ the local schools serving as bridges to the wider society. They have little appreciation of the extent to which the mountain populace at large suffers disadvantages in competition in national labor markets. In fact education items picking up this theme were separated out into Factor 3, already discussed. Furthermore, there is a vocational bias in the patterns of response on schooling questions that fails to take into account the effects of economic and technical change on the general education requirements for effective labor market participation, the acquisition of technical skills, and the countering of obsolescence. (See items 29 and 31 under Factor 7 as well as those under Factor 3.) These views are compounded

with the mountain elites' individualism in the very high degree of assent to the proposition that "there would be less 'welfarism' in the mountains if the proportion of time the schools devoted to vocational courses were greater." This statement (item 20) brought agreement from over 80 percent of our respondents, and across every one of the occupational categories.

The first factor to come out of the components analysis brought together with responses supportive of compensatory education programs (modest majorities) the minority of responses indicating little concern that Federal activities of this or any other kind would bring "too much" intervention in local affairs, or would "sap local initiative." There are vital issues at stake in this that transcend the Appalachian mountains, but in the mountain setting those issues are sharply joined. The question of Federal roles brings us full circle back to the inside-outside theme once again, but with a difference because we now look at institutions and agencies, rather than at persons who come into the mountains. Thus there is a marked difference between responses to the statement that "the Feds don't understand" and responses to the proposition that "Recent national education bills will bring too much Federal intervention in local schools." In no occupation group did agreement with the latter statement characterize more than a small majority, and it was distinctly a minority view among teachers, public officials, and above all the non-Baptist clergy. There is a clear association between age and opposition to Federal "intervention," but it is the least educated of the administrative elites and the most educated of the professionals who come closest to sharing an opinion supporting Federal involvement. Nativity divided professionals sharply, with 59 percent of the native as against only 36 percent of the

non-native expressing fear of Federal intervention in local schools. However, the occupational patterns shift when a statement is unrelated to education, as "Generous Federal financial assistance in local development saps local initiative." Though politicians were again the least opposed to Federal financing on its present terms, this time professionals showed very high levels of disapproval, whether they were native or not and regardless of age or education.

#### Mountain Elites -- Resources for Modernization?

Viewed as a process, modernization may be seen as the interplay of values, experiential knowledge, and socially mobilized behavior. Evidently that process will move most smoothly and rapidly when the men who are best informed and most experienced, and who carry attitudes most conducive to modernization, are also deeply involved in the local society as active participants in political, civic and youth affairs. Or, turning this around, if those who have most influence in the local establishment and are most closely involved with youth have narrow horizons and attitudes that resist change and adjustment to the ongoing national life, the forces making for modernization will be blocked or distorted. This section summarizes our attempt to bring findings together to illuminate such questions.

##### 1. Mean attitude scores by nativity, age, education and exposure

One of the best uses of components analysis is simply to sort out sets of high loading variables. This done, the raw scores on the variables of each cluster can be used to form an index that is purified of the extraneous effects of low loading variables. We constructed such indexes from each of

our factors by giving equal weights to the variables shown under each in Table 5-1 (except that the lowest item of those listed under Factors 1 and 2 was in each case omitted). The indexes carry the same numbers as the factors to which they are related. They are calibrated to permit a range from 0 to 100. Thus, if an individual or group of individuals gave the most extreme possible answers on all the items included in an index in the direction pointed by that index, the score would be 100; at the other extreme it would be zero. A symmetrical combination of responses all along the agree-disagree scales would produce a score of 50. To the eight indexes paralleling the eight factors for the total mountain sample, we added a ninth, constructed from items 3 and 4 of Factor 7,, giving it the label "Belief in mountain employment opportunities"; it is of course a component of index 7 as well.

The indexes have been regrouped in the Table on page 143a to put together at the top those that describe attitudes implying the application of externalized criteria, indexes 3, 5 and 6. These are followed by their opposite, in the anti-migration syndrome of index 7. Indexes 2 and 4 are then put together as entailing positive orientations to the general run of local people and a democratic ethic at the level of local community life. The last three indexes (including 9) have in common that they relate to views of development prospects and programs rather than to people and social values more directly.

Mean attitude scores for the combined administrative and professional elites, and medians of the mean scores for the various occupation groups (including business management and male and female teachers) are given for all of the indexes in the first two columns of the table. The remaining



## MEAN ATTITUDE SCORES AND VARIATION BY NATIVITY, AGE, EDUCATION AND EXPOSURE

|  | Median of Occupation Scores (all groups) | Mean Score, Administrative and Professional Elites | Differences in Index Scores (Administrative and Professional Elites) |                            |                             |  |                                      |
|--|--|--|--|----------------------------|-----------------------------|--|--------------------------------------|
|  |  |  | Non-native minus Native  | Age under 40 minus Age 50+ | College 4+ minus HS or less | Worked in City of 50,000 minus Did not | Visited 5 Major Cities minus Did not |
| <u>Attitudes implying externalized criteria</u>                                    |  |  |  |                            |                             |  |                                      |
| Index 3, Critical view of local schools  | 36                                       | 37   | +6   | +4                         | +7                          | +5                                     | +9                                   |
| Index 5, Burden of disadvantaged environment of mountain children                  | 20                                       | 21   | +5   | +5                         | +3                          | +1                                     | +3                                   |
| Index 6, Receptivity to outsiders  | 42                                       | 44   | +5   | +8                         | +7                          | +5                                     | +4                                   |
| <u>Localism and the anti-migration syndrome</u>                                    |  |  |  |                            |                             |  |                                      |
| Index 7, The anti-migration syndrome   | 44                                       | 50   | -10  | -10                        | -12                         | -7                                     | -7                                   |
| <u>Attitudes entailing positive orientation to the general run of local people</u> |  |  |  |                            |                             |  |                                      |
| Index 2, Defense of general local populace   | 52                                       | 51   | +4   | +9                         | +8                          | +5                                     | +2                                   |
| Index 4, Fostering of grass-roots participation                                    | 61                                       | 58   | -1   | +2                         | -7                          | -3                                     | -2                                   |
| <u>Development Prospects and Policy</u>  |  |  |  |                            |                             |  |                                      |
| Index 9, Belief in mountain employment prospects                                   | 45                                       | 49   | -5   | -5                         | -11                         | -6                                     | -5                                   |
| Index 8, Skepticism about physical development potential                           | 25                                       | 24   | +5   | -1                         | -3                          | +2                                     | -1                                   |
| Index 1, Local-Federal cooperation and compensatory education                      | 52                                       | 52   | +3   | +5                         | -5                          | <sup>a</sup>                           | 0                                    |

<sup>a</sup> under 0,5

columns of that table refer to differences in mean indexes between specified categories of the population; these are set up so that a plus value should be expected if the attitude index was oriented toward national values and modernization.<sup>1</sup> The resulting patterns are indeed consistent in that all values of differences on indexes 3, 5 and 6 are positive, all of those on 7 are negative (as are those on index 9). Somewhat less predictably, all the differences on index 2 are also positive, whereas if we except the age column, those on index 4 are negative. This clearly distinguishes index 4 as a complex commitment to which comes from the most isolated and "backward" groups, more as a survival of the past than a banner of the future. It is important to the future, nevertheless, and reflects a pervasive value in mountain life.

The rankings in mean scores on indexes 3, 5 and 6 are interesting, moving as they do from values most nearly approaching neutrality on index 6, which does not directly challenge local life and institutions, to index 5, with its serious and penetrating challenge. Movement from index 6 through 3 to 5 could be viewed as an expression of stages of awareness through which we might expect alert mountain leaders to move as stronger communication chains are formed and inside-outside information fields become progressively denser. However, as this process operates the conditions that might lead an objective observer to score relatively high on index 5 will be modified; location factors enter in here.

If high scores on attitude indexes 3, 5 and 6 are unambiguously favorable to development and modernization, high scores on index 7, the

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<sup>1</sup>For contrasts by occupation, see Monograph II, Table 3-2.



anti-migration syndrome, are as unambiguously unfavorable. The fact of the matter is that high scores on both indexes 9 and 7, but especially on index 7, reflect extreme localism in perceptions and orientations given the objective situation and economic comparative disadvantages of most of the mountain area. On balance the anti-migration syndrome was clearly rejected by non-native men, the young, the better educated, and those with experience of life in urban centers elsewhere, although it was not rejected without qualification.

The last two indexes of (9 and 1) introduce more ambiguities of interpretation in the framework of this study. Indeed, we were particularly unsuccessful in the regression analyses in explaining variance on Factor 1. (It must be stressed, however, that on all factors the proportions of variance explained were small, however statistically significant. This is an important fact that is concealed when we simply compare differences between mean values for any two or more sub-categories of elites.) But coming back to Factor 1, the most interesting result of the regression analysis was the highly significant performance of the index for civic participation, whatever else was included in a regression equation. This was the only factor for which we obtained such results. With further examination of mountain profiles on this index in relation to other variables it came to look more and more like an indicator of orientation to action. Taking into account its human resource focus, it would seem to be clearly allied with and supportive of development or modernization, but carried into practice it does not necessarily operate in that way.

## 2. Attitude patterns and activity relating to youth

A priori, there seems little reason to assume any particularly close relationships between degree and type of involvement with youth and scores on the various attitude indexes. The most locally oriented and the most outer-society oriented men alike may take an interest in local youth; so may men who differ sharply in their assessments of Federal-local cooperation, compensatory education, and the local status structures and participation of the poor and the young in community affairs. In fact we found little difference in attitude patterns between those who were high or low in youth involvement. The biggest contrast, still only 6 points, was on index 3; those who were high in youth involvement tended to take a more critical (or less uncritical) view of local schools. While this difference should not be ignored, it is nevertheless clear that in their out-of-school experiences mountain youth come into contact with men whose attitudes are quite representative of the attitude distributions among the total mountain elites of our study. Within the schools, messages that are more adequately oriented to the wider society than the prevalent attitudes among the general run of mountain elites will come from the male, not the female, teachers; female teachers whose attitudes promise effective performance of cultural bridge roles are a smaller minority.

## 3. Attitude patterns and participation in civic and political affairs

The relationships summarized in preceding pages should in themselves lead us to anticipate findings of somewhat closer associations between levels of participation in civic and in political affairs and several of the attitude clusters we have indexed.

Again the sharpest distinctions were on index 3; those who were civically but not politically active are set apart from all others in their more critical judgments, though on the average even they balance out just under the 50 mark (at an index of 47), leaning ever so slightly to the un-critical side. All of the other groups, whether active politically only, both civically and politically, or neither, rated index 3 values between 35 and 38. Those who were civically active only were also distinctive in their relative receptivity to outsiders, at a score of 50 on index 6 in contrast to scores of 41 and 42 for those who were politically active only or active in both spheres.

The civically active, this time whether or not they are also politically involved, are the most supportive of local-Federal cooperation and compensatory education (mean values of 60 on index 1). The public officials, who rated highest among the occupation groups on this index, were not strong enough among those who were "politically active only" to neutralize the low scores of bankers; those public officials who in fact scored highest on index 1 were in most cases civically as well as politically active.

Political involvement, with or without civic activity, was distinguished by the lowest scores on index 5, as we should expect; this is the most sensitive index in its challenge to locally rooted loyalties. For somewhat similar reasons, the two politically active groups scored higher on the anti-migration syndrome than the civically active or the generally inactive.

Taking those who were high and those who were low on youth involvement and then comparing the mean attitude index values across the civic and political participation categories within each of these youth-involvement

classes sharpened a number of contrasts, with the greatest differences appearing sometimes within the high, sometimes within the low youth-involvement sets. Thus on receptivity to outsiders, the sharpest contrast was within the low youth-involvement set, where index values ranged from a low of 32 among those who were politically active only to a high of 53 among those active civically only. Contrasts on indexes 7 and 4 were also greatest among those with low youth involvement. Within that set the range in values on index 7 (localism and the anti-migration syndrome) were from a low of 44 for the civically active only to a high of 59 among those active both civically and politically. The range on the grass-roots involvement indicator (index 4) were from a low of 48 among those active civically only to a high of 65 among those active on both the civic and the political fronts; this range extends in both directions beyond the range within the high youth involvement set.

Most striking of all is the sharp contrast between political and civic activists within the high category on youth-involvement with respect to their evaluations of local schools. The former, as we might expect, are decidedly defensive of the local schools, an attitude in which they are approximated by men who are inactive in every respect. On the other hand, men who are high in both civic activity and youth involvement are the one category of men that we have distinguished among whom attitudes toward local schools are preponderantly critical. While these patterns should not surprise us, they show very clearly the conflict potentials with respect to school reform, and they go some way toward explaining why efforts to improve mountain schools have encountered so many difficulties.

#### 4. Portents of modernization of elite attitudes

Despite the distinctiveness of the various attitude complexes represented by the factors and associated indexes discussed in prior pages, it is entirely reasonable for some purposes to collapse them into fewer groups. This we did to derive over-all "modernization scores," as the sum of scores on indexes 3, 5 and 6 minus the score on index 7. We might equally well have labeled the resulting scores measures of "outside awareness." That is, we are in effect defining "modern" as attitudes and perceptions of the mountain elites that reflect their adoption of criteria of judgment that entail reference to standards from the wider society and receptivity to people and ideas from that "outer" world.

Using this collapsed index (and also Indexes 1 and 4 as they stood), we drew attitude profiles, first simply by occupations (Figure <sup>on page 156a</sup> A). We then went on with each attitude to examine profiles for various sub-categories of the sampled population -- including cross-classifications of occupation and of activity types with age, with nativity, and with "feelings about living in the area."

On all three attitude measures, but especially on modernization, age differentials were clear and persistent within each occupational, nativity and activity category. This suggested the exploration of future prospects via a re-examination of age differentials in terms of their implications for change. What might we expect as the younger cohorts among the native and non-native permanent populations progressively displace the older in community affairs. In thus speculating, we returned to the occupational categories as the most convenient way of taking inventories of the human resource potentials. This

had the advantage also that it enabled us to include teachers, who are excluded when classifications are based on the activity (and youth-involvement) data.

Undoubtedly the very process of growing older and the associated changes in roles and responsibilities affect some of the ways in which men view themselves and others, but there seems to be no a priori reason for expecting such a process to affect the attitude dimensions that are most critical for the determination of modernization scores. Much more likely is persistence in the perceptions of the individuals who are now in the younger age groups, with only minor age-induced modifications. Under this assumption there will be a shifting of the now younger attitudes up the age scale in the future. Maintaining this assumption, we may look at the implications within each occupation, treating "public officials" like any other occupation group despite the fact that this group in our sample is not an occupation group in the same sense as teachers, clergy, physicians or lawyers. The procedure, which is very crude, was to take average ten-year age differentials within each occupation as of 1966. Those ten-year attitude differentials were added to the 1966 scores for each age cohort to derive the projected 1976 modernization scores of an elite population with the same age composition as that of 1966. The new younger men coming into the 1976 population were assumed to be just like their 1966 brothers, an assumption that allows no change between the present and the next decade's cohorts of younger men; this may help offset any upward bias in our projections due to affects of aging per se on attitude complexes.

The projections of 1976 modernization scores did not shift the ranks of any of the occupations, and all moved upward. However, changes are uneven. If the very simple hypothesis on which these projections are based were

valid, we might anticipate a progressively more favorable climate for modernization among all the administrative elites and the Baptist clergy. Relatively, the bankers would lag even further behind than in 1966. Female teachers would drop back in relative position to a place very close to the Baptist clergy and the public officials (who lead the administrative elites). Next to the female teachers, the male teachers would make the smallest advance. Physicians, on the other hand, display the biggest age contrasts of all, and would move furthest in the modernization direction. Over-all this exercise gives ground for an optimism that is supported by other considerations with respect to continuing progress in the integration of mountain elites into the wider national culture and economy over the decade ahead. But there is also ground for grave concern, and on several fronts, not the least of which is the schools. This is a matter to which we will return in section IV.

#### Personalism, Politics and Power

We began in this research by making clear the ecological basis for the segmented nature of Appalachian society, both internally and with respect to the national society. Subsequent analysis of our data demonstrated the related cultural disjunction that is reflected rather strongly in the values and behavior of area elites. This context of regional (and of sub-regional) ethnocentrism evidently conditions the effectiveness of communication resources in bringing about the further integration of the inner and outer societies. But if there are distinctive and strong localist patterns in attitudes and behavior, there are also sets of individuals of wider experience and cultural orientations, men with relatively great potential as catalysts in the interaction

between people of the mountains and those elsewhere. How far those potentials are mobilized and in what ways is another question.

We have seen on previous pages that, teachers aside, there is little correlation between attitude patterns and involvement with youth, although the occupational selectivity of youth-linked roles gives a slight edge in the direction of more rather than less modernizing influences. We have seen that the most civically active members of the mountain elites are on the whole men with the greatest potential of exercising mediating roles that would bring mountain people and institutions more fully into the stream of the national society; they evidence this potential both in their greater extent and range of experience outside the mountains and by virtue of attitudes that manifest their abilities to see mountain people and institutions from both ends of the bridge. The non-Baptist clergy stand out from all others in these respects.

However, in most of the mountain localities there is a marked gap between the civically and the politically active, with only a very small minority active in both spheres. Professional men other than lawyers who have taken on formal political roles of any kind are extremely rare, and non-natives in such roles are equally so. Also, the non-natives of our study who scored as politically active were the most conservative and backward looking of all; this was the way they compensated in demonstrating their reliability to the local politicians. After all, it should hardly surprise anyone that in the mountains, as elsewhere, the politically most active tend to be also the most localistic and defensive of the area. The fact that the public officials scored highest on attitude Index 1, favoring compensatory education programs and Federal-local



cooperation, does not alter this fact. Rather, this should stand as a warning to the uninitiated outsider that what happens to a program in the mountains may not be quite what he anticipated, and that this is the more likely to be the case the greater the degree to which it is locally in the hands of the county establishment of banker, lawyer, and public official -- some striking individual exceptions to the contrary notwithstanding.

These considerations bring us to two final facts and problems of mountain life that must be of special concern to any outsider who is interested in Federal-local cooperation or, for that matter, in involvement in any way in the legislating or the implementation of development programs in the mountains. These are (1) the personalism of mountain life, and (2) its very political flavor on the local level.

#### 1. Personalism of mountain life and local sensitivity

The problematic nature of Appalachian modernization as seen in this study does not lie in a banal counterposing of "local" conservatives and "cosmopolitan" progressives. Cutting across such misleading simplifications is the culture of a region in which a highly particularized and affective treatment of one's neighbors is still ranked as a value of the very first importance. In that context, native "conservatives" often can act more freely because they work within the culture, whilst "progressives," especially when they are in any degree "foreign" (and most of those who fell in our sample were "foreign"), are more likely to score short-lived achievements -- and those only at the cost of long-lived mistrust. This problem is greatly aggravated when the outsider comes in for the purpose of implementing particular programs without first establishing residence in the area and an

identity there in a more diffuse context.

The confusions and misunderstandings that arise in confrontations between local people and those who come into the mountains on short-term assignments are legion. They reflect quite as much ethnocentricity of the outsiders as of the mountain people, and on many fronts. But most important of these is the cultural distance between the personal face-to-face society of the mountains, in which men are viewed as total persons, and the essentially anonymous character of an urban society in which an individual may parcel out his life in segregated roles in which he is always just an aspect of himself. A mountain audience will pay more attention to what a man is than to what he says, and on the former they will be very perceptive indeed. Problems are exacerbated by the touches of noblesse oblige or the subtly unconscious snobbery in those outsiders who come in to do something for the mountains. Mountain pride may be too sensitive, and at its worst suspicious and ignorant, but at its best it is the essence of human dignity and responsibility.

There is a pervasive belief in most mountain communities in government of the people by the people, even if some forget about government for the people (as, indeed, some do). And by the people means local responsibilities whether or not with the participation of "the poor." This cuts across communities that range from something close to a real grass-roots, small-scale polity to the dual social-status and political structures of some of the coal counties. It is illustrated in the frustrations experienced by many anti-poverty workers who, in their attempts to mobilize support for multi-county social planning units, challenged the local notion that legitimate expression

of such interests should be through their aggregation under the umbrella of already existing local institutions. Against this experience must be set the extensive development, however much faulted in practice, of pragmatic aid programs under the aegis of local public administrations -- as Work Experience and Training (referred to in our study by one of its less picturesque pseudonyms, the "unemployed Fathers' program"), and the Food Stamps, and Head Start programs.

It is very clear that the pluralistic, or interest-articulation model of agency and action structures, with its complex specialization of roles and functions, runs counter to the cultural and political norms of the region, where institutions are more ready to absorb new functions than to make way for new institutions with new allegiances. When it became apparent that they were being challenged by wholly new organizations, with substantial payrolls financed by the Federal Government, the reaction of regional elites was to seek redress on behalf of the apparatus of local government. This was achieved, in the anti-poverty arena, by the 1967 Green Amendment to the Economic Opportunity Act.

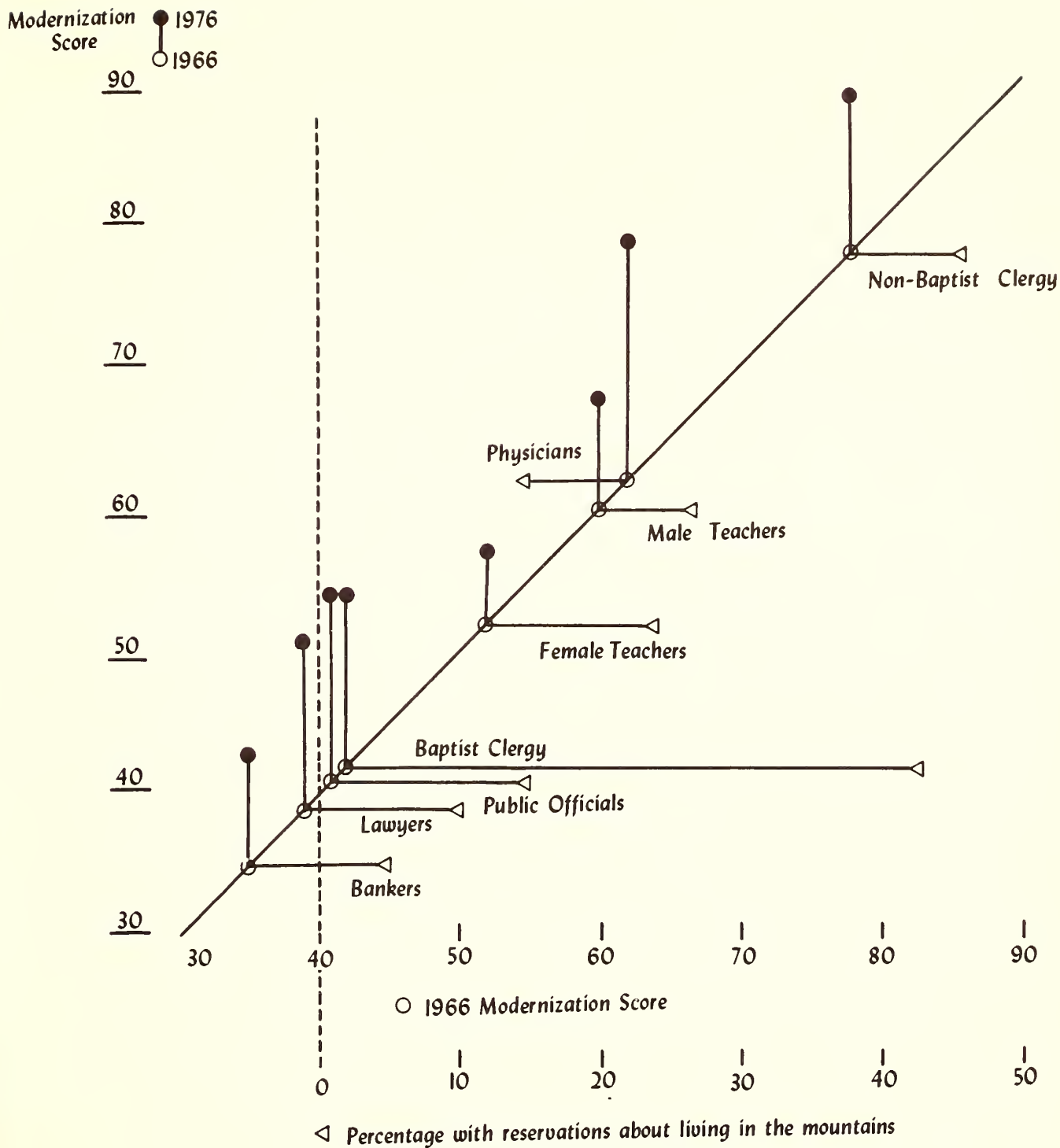
## 2. The Mountains as a "very political" place

One of the difficulties is of course that what is involved in the confusions and conflicts experienced in confrontations between local and non-local officials and agencies (from the lowest to the highest levels) is not just cultural gaps or the broad issue of localization of responsibilities. It is also, and inevitably, the reaction of particular local groups to outside intervention whenever such intervention seems to threaten the local political pre-eminence (and patronage power) of those who are among the

"ins." There is nothing unique to the mountains in this; it is just smaller scale and more obviously personalized. But it is also true that in the mountains the county establishment of bankers, lawyers and public officials, predominantly older native men, are frequently characterized by a kind of localism of attitudes that seems particularly frustrating to those, both local and non-local, who see things in a wider framework. Our attitude data key in to this unmistakably. On the combined modernization score for 1966, all of the administrative elites had ratings that averaged between 30 and 40, as against average scores of 50 to 60 for teachers, physicians, and participants in the management course, and nearly 80 for the non-Baptist clergy. (See the chart on page 156a.) But this is not all.

There is a real phenomenological basis for the image of rural Kentucky, and of the Kentucky mountains in particular, as a "very political place." That image was re-iterated in 1957 interviews with outside businessmen who had at least looked at possible plant locations anywhere within a hundred miles of the bounds of East Kentucky over the prior five years; comments of this kind were the more notable in that there was nothing on a long check list used in those interviews, and nothing in the informal part of the interview, that should have suggested such a response. This "very political" character of rural Kentucky has made its appearance again and again in the history of Appalachian development efforts and federal programs over the decade since 1957. Furthermore, the same image is projected from within the mountains, not just from those who have looked in from other vantage points. Many of the respondents on our study of mountain elites, including numerous natives of the area along with non-native long-term

### 1966-76 MODERNIZATION SCORES AND 1966 FEELINGS ABOUT THE AREA BY OCCUPATIONS





residents, complained of the highly politicized atmosphere in abundant free comments written in on our questionnaire. The same political tone is evident in treatments of local affairs in area newspapers, especially in the coal counties. Whether this atmosphere is defended as "local political vitality" or condemned as a socially detrimental and even "iniquitous" power game, it is there; and in the small community it is very much in the center of mens' lives. And so we find that it is on problems connected with the allocation of power that the main modernization efforts have stumbled: in the administrative reorganization of education, in the effective involvement of the poor in community decision-making, in defining the role of outsiders (including Federal administrators) in the building of local social-action institutions, and in the accounting between short-term profit-taking of the strip mines and the long-term socio-economic interests that derive from the environmental amenities of the region. In the Kentucky mountains, as elsewhere, some men's votes have louder voices than others.

In sum, fundamental and pressing conflicts of interests and gaps in communication have to be recognized both with reference to the internal structure of mountain life and its relationships to the rest of the nation. Each group has an interest in the development of better communication with and understanding of the others. This applies to elites in relation to non-elites, administrative in relation to professional elites, and, above all, "insiders" in relation to "outsiders." But the nurturing of these cultural combinations must be a continuing long-term process to allow for the diffusion, against ecological, social, and cultural resistances, of crucial motivational and institutional change.

IV. SELECTED COMMENTS AND SUGGESTIONS

Each of the two research projects summarized on preceding pages was designed as a contribution to social science, along with its particular concentration on empirical study in the Kentucky mountains. The authors did not set themselves up as a two-man "task force" to promulgate programs and policies for Appalachia. On the other hand, both authors are very much interested in the area, in its future, and in the future of its people. Furthermore, there is some obligation on anyone who has probed into the mountain situation to set down any policy judgments that come out of such probes, (together with more general thinking about pertinent problems and issues of the kinds that are salient in the mountains). The comments and suggestions that follow are accordingly pulled out of our analyses in a highly selective way, and should not be interpreted as a summary of our main findings. The points taken up are selected on two grounds: (a) those questions on which we have been especially asked to comment, with whatever insight we might bring to them, and (b) the things we want most urgently to say to Federal policy makers and program implementers, regardless of whether they might also have come out under (a). It should surprise no one that criterion (b) has a greater part in what follows than criterion (a).



A. Concerning Financial and Managerial Assistance to Local Enterprises

Questions have been recurrently posed to us on this subject, and on the frequency of business contacts with and knowledge of Federal agencies in particular. What our data show in these respects was summarized in section II. In brief:

1. There is no serious information gap with respect to the availability of government assistance to small enterprisers.

A few of the most ineffective entrepreneurs were clearly misinformed concerning sources and conditions of government financial help, but we found little evidence of this among firms we regarded as otherwise likely candidates for assistance.

2. It is those least in need of managerial advice who seek it, but they seek it from other sources, not from government offices. They find it.
3. Those most in need of help usually resist and resent advice linked to the granting of government loans.

Unfortunately, we have no suggestions as to how this problem could be overcome except by indirect measures. It is evident that for businessmen in this category, agencies that are locally identified may have a communication advantage, although there are exceptions in certain parts of the mountains. (Resentments are aggravated when there has been expectation of a specially "good deal" under government programs. The more capable businessmen spoke more favorably of SBA and of the calibre of SBA personnel.)

4. The most important role of federal financial assistance in mountain localities is in providing an alternative that counterbalances the monolithic power of local banks in some mountain areas.

It must be stressed in this connection that what is important is not low interest rates or the forgiving of part of a debt. It is simply a matter of bringing competitive sources of funds to businessmen whose horizons and abilities to obtain financial help from the city bankers are narrowly circumscribed.

5. The system of finance for local mountain enterprise is highly personalized.

This applies both with respect to the grounds on which local bankers make loans and to the frequent tapping of sources of help from individuals with whom the businessman has personal contacts. Personalized finance has important advantages in that local bankers will often make loans on a kind of security (knowledge of a man) that would not be admissible in a less personalized situation. It also has obvious limitations, including a disinclination of local bankers to grant loans for types of undertakings with which they are not familiar.

6. The record of success among those who had received Federal financial assistance under ARA provisions for aid to expansions or new investments has been on the whole dismal so far as manufacturing is concerned.

This is not a criticism of the local offices of Federal agencies but a comment on the local economic situation in general and on the program as a development-assistance policy. The small subsidies involved do little to neutralize the inherent comparative disadvantages of doing business in the mountains; in fact, where those disadvantages are minimal there seems to have been little difficulty in securing financing from other sources. Also, among

recipients of financial support under this program there has been a tendency to underestimate investment costs, with an ensuing severe squeeze due to lack of operating capital. However, there were several cases still being considered, or receiving assistance too recently to permit a follow-up assessment. Presumably better information on this matter is available in EDA files.

B. The Problem of Minimum Wage Legislation and Some Suggestions

This deals with matters that we definitely have not been asked about, but that come up again and again in interviews with mountain businessmen. It must command the attention of policy makers concerned with jobs in backward or depressed areas.

1. Attempts by local individuals and communities to set up businesses that would provide jobs for local men in tasks that utilize their limited skills have often broken on the rock of minimum wage legislation.

There is ample evidence that reports of these experiences are not merely the griping of old-fashioned exploitative capitalists. For one thing, the unskilled men (and women) who lost out in this situation are living at substantially lower economic levels under public assistance. But even if this were not so, minimum wage laws, compounded by payroll taxes, put a floor under wage costs that can be much more important to the success of enterprises that would maximize job opportunities for mountain men than any possible counteracting effects of the federal efforts to make capital more available and cheaper.

2. It is suggested that as a minimum counteractive to the above distortions (and the further tendency of federal credit programs to support capital over labor-intensive investments) consideration be given to the provision of outright grants to cover payroll taxes in distressed areas.

An alternative would of course be to exempt enterprises in such areas from payroll taxation when they employ some minimum number of men. We are quite aware of the strong arguments that can be brought against area designation for this purpose -- as for other purposes to which it has in fact been applied. Clearly preferable would be something much more sweeping: the substitution of general taxation for payroll taxation in the financing of unemployment and old age benefits across the nation.

3. It is further suggested that serious thought be given to the initiation of wage subsidies to enterprises employing men over some designated age (say 40?) who have been long-term residents of economically distressed areas.

Such a program clearly could not, and should not, be extended beyond designated distressed areas. It is more properly to be seen as an anti-poverty than as an economic-development program. Although there has been very limited attention to the notion of introducing wage subsidies to neutralize the impact of national minimum-wage legislation in low-income, low-opportunity areas, we are not aware of any prior suggestion that such policies might be confined to the least mobile age categories. From every point of view (that of the men employed, of their families, of others in their communities), this policy has much to commend it. Not only is it consistent with conventional goals of national-product maximization. It is also the surest anti-poverty measure we can think of to preserve and enhance the dignity of the human beings most effected.

C. Social Amenities and the Social Costs  
of the Coal Industry

One of the most widely deplored and hotly attacked features of the economies of the mountain coal counties is the dramatic and rapidly spreading destruction wrought with auger and strip mining, a destruction considerably worse in some respects than was witnessed earlier in Southern Illinois. This is one of the most striking examples of a situation in which the votes of a minority of coal operators (local as well as absentee) and a few of the most conservative of the members of the local county establishments count many times as much as the votes of the populace at large. A few men of considerable power talk out of one side of their mouths about developing tourism in the mountains, or more generally of bringing industry in, while giving little heed to the poisoning of rivers and the destruction of farms and homes that is going on around them; indeed, some of them actively participate in this destruction by their opposition to measures that would check it. There are mountain leaders who have acted to effect a reversal of such destruction -- quite a few of them in the legal profession. There is little we can add to the sorry story they tell except to say two things:

1. The evidence of our study indicates that there is overwhelming support among the mountain elites, and all sub-categories thereof, for strong national or inter-state action on this matter.

It has been asserted by defenders of the coal industry that legislation that would prevent the devastation of which we are speaking would just put more men out of work. The evasion of genuine social accounting aside, we were curious as to just how widespread such a notion might be. Accordingly, we included on our opinionnaire the statement:

"Interstate pacts or national legislation with teeth in it to control strip mining and require land rehabilitation would just put more mountain men out of jobs." Three fourths of our respondents disagreed with this, most of them strongly; a sixth agreed, and the remainder checked that they had no opinion. As we should expect, those most often in agreement were the public officials, bankers, and lawyers; but even among them those agreeing made up less than 30 per cent, and there is every reason to believe that the supporters of this statement have shrunk further in the past two years.

2. Interstate collaboration in a genuine attack on the problem of destruction wrought by coal mining and on the social costs the industry is evading is long overdue.

The much heralded experimentation in inter-state and federal collaboration that was supposed to be initiated with the legislating of an Appalachian Regional Authority was evasive from the start on this. Only thin and essentially meaningless provisions concerning rehabilitation in the coal fields, provisions that could have raised objections from no one (and hence accomplish virtually nothing) were included in the initial Act. The problem is a familiar one; we have it in a somewhat different (and even less tractable) form in metropolitan air pollution. But this does not alter the fact that a more honest social accounting is long overdue.

#### D. Mountain Schools and Teachers

It has been proposed that the major means for reconciling local and national interests and for promoting a region-wide identity in Appalachian Kentucky lies in the educational system. The importance of schools as agencies for the development of productive capabilities (the "formation of human

resources") is even more widely recognized. How far and how effectively mountain schools perform these functions, and prospects for their future performance, is unquestionably of great importance.

Unfortunately, evidence is irrefutable that the bulk of the youth who have been coming out of mountain schools in the past -- and today -- have been ill-equipped to compete effectively in national labor markets. Achievement levels of highschool seniors of the mountains are generally low as measured by state-wide tests, despite the fact that they are a more selective group given the high drop-out rates. (There has been substantial improvement in school continuation rates at least beyond eighth grade completion over the past dozen years.) It is also undeniable that in many if not most parts of the mountains the key positions in the school system are political prizes, constituting one of the foundations of local patronage systems. All these are facts that could be documented without reference to our researches.

No one should expect that a school can fully neutralize effects of disadvantaged homes and neighborhood. On the other hand, it is equally clear that schools can reinforce localist segmentalization of cultural awareness or they can operate to offset it, and in significant degree. In the mountains, in contrast to the city ghettos, teachers may have the advantage of working in a much less overtly hostile and rebellious classroom environment, which should mean a more favorable situation for constructive outreach in the preparation of children for effective participation in tomorrow's world. How far this can and will in fact be accomplished will depend upon the outreach of which the teachers themselves are capable, their

motivations, and the support or blockage of such endeavor by school administrations and by other members of the local elites.

This is not the place in which to lay out a full set of recommendations for improving mountain schools. We confine ourselves to just one kind of policy question -- policy with respect to school personnel. First, however, we reiterate a few of the key findings of our research.

1. Most of the mountain elites were decidedly uncritical and strongly defensive of local schools, and generally the strength of this defensiveness bore an inverse relation to objective evidence concerning the qualities of the school personnel and the achievements of pupils.

The most emphatic in their insistence that local schools were doing a good job were the bankers, the Baptist clergy, and the manufacturing entrepreneurs. There may be some grounds for encouragement in the fact that a fifth of the local public officials were nevertheless ready to take a more critical view of the local schools. So were a fourth of the male teachers (fewer female) and a third of the physicians and the non-Baptist clergy. On the other hand, though few teachers (or Baptist clergy) were ready to admit that education given youth in mountain schools did not prepare them for life elsewhere, large minorities or small majorities of all the other elites took this position. The only prevalent criticism of local schools on the part of the administrative elites (public officials, bankers, and lawyers) was the majority opinion in those groups that the local schools did not put enough emphasis on training for jobs in the mountains. (What jobs is not clear.) The mixture of loyalties, frustrations, and limited knowledge reflected in these responses illuminate both the weakness and ambivalence of support for school improvement in the mountain areas on the one hand, the potentials for a breakthrough in school policy on the other. There are in



fact isolated examples of quite remarkable community involvement in school improvement and in the diffusion of educational ambitions in what might seem to be very unlikely locations. (It is also a fact that progress in school retention has been negatively associated with changes in local job opportunities; over time the worse the local economic conditions, the better the school retention rates.)

2. Male high school teachers were considerably ahead of the administrative elites and the Baptist clergy (though far behind the non-Baptist clergy) in their "modernization scores."

This means, among other things, that the male teachers potentially could perform a cultural-bridge role for mountain children. Female teachers, unfortunately, tend to lag considerably behind the males in this respect; so do the bulk of elementary school teachers -- the oldest males excepted. Unfortunately, there is also dissatisfaction with mountain life among just those teachers best qualified otherwise to exercise intermediary roles, and these are probably the men (they are mostly men) most likely to leave the mountains after a short term in mountain schools. In part this is inevitable. However, the problem is aggravated where, as is too often the case, the teachers who attain high integration or centrality in local community life are the most narrow in their horizons.

3. If we judge by age-characteristics of the present teaching force, prospects for their future improvement in orientations that would bridge cultural gaps and reach out to the wider society are gloomy.

This prospect is again especially discouraging with respect to the female teachers, who seem likely to move forward less than any other occupational group among the mountain elites over the next decade.

4. There was very little resistance expressed with respect to the importation of out-of-state teachers to work in mountain schools. This tolerance contrasted sharply with attitudes toward other outsiders in the mountains.

This receptivity (or, perhaps more correctly, this prevalent relative neutrality with respect to the teacher from outside) could be viewed cynically, as signifying that the teacher poses no threats to the elites, that teachers have no central position in the community and are in no position to make nuisances of themselves. There is certainly much truth in such an interpretation. Reactions to<sup>a</sup> question concerning (imaginary) non-local school administrators would undoubtedly have been quite different. But we may turn this around. Teachers who come into the mountains from other areas are very different from the "outsiders" that mountain men most resent, in several significant ways. They come to settle in the mountains for a long enough time to share in mountain life, to listen to mountain people, to be part of the community in a very genuine sense, even if not part of the ruling cliques. Their roles are familiar ones to the traditional society, and there is no problem in accepting them in those roles. In all of these respects they can be quickly assimilated into the mountain scene. Furthermore, that the teachers stand apart from local power wielders means that they are also to a considerable degree insulated and freed from them; both teacher credibility and room for maneuver gain from this fact.

5. We suggest (in the light of the above and other considerations) that a program that brought teachers from other areas into the mountains should be developed.

In our judgment it would be a mistake to underestimate the potentials for outreach in the development of mountain youngsters (and their parents)

that could flow from a greater influx of teachers. One way in which this might be done is by arranging a rotation system that would provide for one or two-year replacements of in-service teachers in their home communities. If some of these teachers came from the communities to which mountain people most often migrate (whether in Kentucky or as far away as Chicago or Detroit) there would be the further advantage that teachers who had lived in the mountains on such rotations would be able to carry back with them another "exposure" -- an exposure to, and hopefully an emphatic comprehension of, what migrant families bring with them from the mountains into their new urban environments.

6. We suggest (in part paralleling 5.) that a much more intensive and extensive program should be developed to provide further in-service training for mountain teachers in institutions and communities that would enlarge their cultural and economic horizons.

There is an immense variety of ways in which this can be done, and the how of such a program can make all the difference in what it accomplishes (or whether it accomplishes anything). Again, while we can hardly set ourselves up as a commission of experts on the subject, we urge that this matter be approached afresh.

E. Acculturation of Outsiders and the  
Mobilization of Cultural Intermediaries

Attempts to short-cut regional planning by doing the "simple" physical tasks first have led to the unrealistic bifurcation of physical and human-resource development efforts. Each program has its own constituency in the Mountains. But worse still, attempts to cut the Gordian

knot of poverty and dependency by applying the clinical skills of social engineering have repeatedly demonstrated that human-resource development is less a technical than a cultural process. Failure to meet real and persistent cultural demands has led to frustration and skepticism on all sides (and this is a multi-sided matter). It takes more than normal temerity to wind up these comments with advice on how human beings should deal with each other, or for that matter which human beings with which. Nevertheless, we feel under obligation to express a few judgments on these matters in view of the evidence we turned up in our study of the mountain elites.

1. To work effectively in the mountains (on anything beyond a limited technical-type job with visible physical resource import) an empathic appreciation of the qualities of mountain culture is essential.

This basic generalization has a number of correlaries. Among other things, there is a strong presumption in favor of the teacher-rotation program suggested above. It argues also for stress on orientation to values of the mountain culture, with respect for those values as a prerequisite to work in the mountains in any capacity involving people. Indeed, in greater or lesser degree it underlies all the points that follow. Use of the preposition "of" instead of "to" in the heading to this section was no typographical error; we meant just that. Intercultural accommodation has to work two ways, a fact that floating outsiders on mountain assignments (volunteer or otherwise) are prone to forget.

2. Volunteer youth can play an important role in community and human development programs but only to the degree to which they are tuned in on mountain people.

This is of course another correlary of our first point. It suggests

the importance of conformity in non-essentials of dress and behavior, but that is the easy part of the problem.<sup>1</sup> It suggests further that those who go into the mountains on VISTA or related activities would be most successful if they come from the mountains. But it must be recognized that mountain societies vary in the degree to which there are internal conflicts and social chasms across which communication is limited or distorted. Where such conflicts and communication gaps are most severe, "trouble" will crop up. To this we can say only, let the trouble be as locally defined as possible, that it may express the voices of mountain people and not of intruders wishing to bring outside conflicts into a society that has enough of its own. Young people from a community may sometimes feel under more constraints in returning to it, but they have the great advantage that they are still part of "the mountain family."

3. We suggest that there may be considerable untapped resources in mountain people for voluntary involvement in local community and human development efforts, and that seeking out such individuals might prove rewarding.

This suggestion is made with less assurance than the others. It rests primarily upon two observations. First, in the mountains (as elsewhere) the major part of community activities is carried by a limited group of men. How far there has been a real effort to diffuse responsibility and participation is open to considerable doubt. Secondly, it seems extremely doubtful that the proliferation of jobs on federal payrolls in the mountains has

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One of the simplest lessons, which should have been obvious enough from the start (but to some, is not yet) is that dress and grooming are cues to the man. Long-haired men, especially when they are also ill-groomed, are far more likely to turn mountain people against anything the visitors may stand for than to induce constructive action. There is no real purpose to be served in trying to "teach" mountain people that they may be wrong in their interpretations of long hair.

been beneficial to the society or the economy the "money it has brought in" aside. It has often had perverse results, adding more to the patronage system than to socio-economic progress. (It would be worth while to estimate just what the costs of administration of mountain programs have been, relative to their accomplishments -- whether in jobs or incomes for non-federal employees, in community betterment, or in human resource development.)

4. Finally, and without reservation, we would urge a seeking out of those men, resident both in the mountains and elsewhere, who are most fully qualified for the performance of cultural-bridge roles.

There have been some attempts to do this, of course, and a few well known individuals have been active spokesmen for the mountains on the national political arena. However, there is a great deal of truth in the repeated mountain allegation that "the Feds don't understand" -- an allegation with which on a number of occasions we would have had to agree. The tenants of Washington offices, and those who come on short trips (by plane) to the mountains, need better and more tuition concerning the society and people with whom they are seeking to cooperate and on whose behalf they are attempting to formulate and implement policy.



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